

THE LADIES' GUIDE TO

HEALTH AND BEAUTY

CONTAINING

FULL INFORMATION ON ALL THE MARVELOUS AND COMPLEX
MATTERS PERTAINING TO WOMEN

INCLUDING

CREATIVE SCIENCE; BEARING, NURSING AND REARING CHILDREN;
HEREDITARY DESCENT; HINTS ON COURTSHIP AND
MARRIAGE; PROMOTING HEALTH AND BEAUTY,
VIGOR OF MIND AND BODY, ETC., ETC.

TOGETHER WITH THE

DISEASES PECULIAR TO THE FEMALE SEX

THEIR CAUSES, SYMPTOMS AND TREATMENT

THE WHOLE FORMING A

COMPLETE MEDICAL GUIDE FOR WOMEN

BY

MONFORT B. ALLEN, M.D.

AND

AMELIA C. MCGREGOR, M.D.

Embellished with Many Superb Colored Plates,
Phototype and Wood Engravings

[Published in 1903, Allen's Guide
was one of the most widely read of
the genre.]

THE LADIES' GUIDE

TO
HEALTH AND BEAUTY

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PREFACE.

WHAT all wives, mothers and maidens should know respecting themselves, is fully and clearly stated in this new, very comprehensive and charming volume. It contains the most important and valuable information concerning the female organism, the physical life of woman, and all subjects in which she is most deeply interested.

PART I.—LOVE AND MARRIAGE. The love which blossoms into marriage and maternity; the wise counsels which should regulate courtship and the conjugal state; and the necessary qualifications for married life, are all set forth in a way that both instructs and delights the reader.

How to render marriage and motherhood the sources of the purest and deepest happiness known to earth; the temperaments that should unite to form a perfect wedlock; the harmonious development of the whole woman; manly husbands and devoted wives; these and kindred subjects enrich the pages of this work.

PART II.—THE REPRODUCTIVE ORGANS. This part treats of creative science. Reproduction is nature's grandest work, yet how little understood! Ignorance on such a subject as this is a sin. This comprehensive volume pours a flood of light on all the wonderful and complex matters peculiar to women.

It answers questions which all mothers and daughters desire to ask and furnishes information on a great variety of subjects but little understood, which are all important to the health, the happiness and the long life of both the married and the unmarried.

This work is a self-instructor, replete with knowledge of the female anatomy. "Know thyself" is the old adage, and every woman can fulfill the injunction by perusing this volume. It is a faithful friend and companion. All that goes before childbirth; all that married persons should fully know and understand, is plainly stated. And

these delicate subjects are treated in such a way that womanly modesty is never offended.

The marvelous human germ; the growth of the new life; labor and confinement; lactation or nursing, are all described, together with female complaints and diseases. The kind physician and helper is always at hand. Indeed, this volume, packed from lid to lid with excellent advice, plain hints and suggestions, and information needed every day, may truly be called a life-saver.

PART III.—CARE AND MANAGEMENT OF CHILDREN. A well-known writer has said, "It is the mother after all that has the most to do with the making or marring of the man." What every mother should fully understand respecting the child, born of her love and committed to her care, is contained in this work and should be read in every home throughout the land. Our American girls are growing stronger, rounding out into a more perfect physique, and securing better health, because their mothers are giving them more intelligent care in childhood, and our best schools afford them a thorough physical education. This work is right in the line of that education which aims to make our American youth as strong and vigorous in body as they are bright and capable in mind.

PART IV.—FEMALE BEAUTY AND ACCOMPLISHMENTS. This is a subject of universal interest. To improve one's personal appearance and endow it with new charms might almost be considered a duty. More than half of the success in life among both sexes depends upon personal appearance and first impressions. Good common sense, hygienic rules and suggestions are of the utmost value. Many a lady of fashion, pale, sickly, lifeless and miserable, would give all she is worth for the rosy bloom on the cheeks of the healthy, happy peasant girl.

PART V.—POLITENESS; OR, WOMAN IN SOCIETY. Tasteful and becoming dress; deportment and good manners; the art of conversing well; rules of etiquette, and other important subjects are comprised in this part of the volume, the comprehensive and valuable character of which is seen at a glance.

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"LOVELIEST OF LOVELY THINGS"

WORDSWORTH



THE YOUNG MOTHER

PART I.

LOVE AND MARRIAGE.

CHAPTER I.

THE QUALIFICATIONS FOR MARRIED LIFE.

Love, the Source of Happiness or Misery—Woman's Place in Mohammed's Paradise—Marriage an Ordinance of Heaven—Parents Stamp their Characteristics on their Children—Nature's Time for Marrying—Well Developed Mind and Body—Evil Habits—Self-Government and Discipline—Industry and Thrift—Young Ladies and the Fashions—Domestic Duties—Value of Self-Reliance—Lamentable Ignorance—Hereditary Influence—Marriage Means Parentage—Lawful Pride in Fine Offspring.

N^O emotion in the human breast is more powerful than that of love. None is more productive of happiness when rightly controlled and directed. When allowed to run wild and override all reason and restraint, none is so fruitful of misery. Love is the law of heaven and earth. It makes life a blessing or a curse. Milton in one of his loftiest poetic flights exclaims :

Half wedded love, mysterious law, true source
Of human offspring.

Mohammed acted with unusual sagacity, displayed no ordinary understanding of human nature, and adopted effectual means for the accomplishment of his cherished object, when, to secure converts to his new religion, he promised that the eternal abode of the faithful should be made joyful, and lighted up with the charms and smiles of Woman ! This was an appeal to one of the strongest passions of our nature, and proved effectual in securing the attention of the stronger sex ; and, in that age, this object achieved, secured the influence and commendation of the gentler and more refined half of our race.

From the earliest time, and among all nations, whether shrouded in Pagan darkness or enjoying the pure and elevating influence of Christianity ; among those who treat the female sex like slaves and

beasts of burden, and those who recognize her as entitled to an equal rank with man, companionship between the sexes has ever been found to be the strongest desire of our race. It is not peculiar to either sex, but is cherished in common by both.

This is an ordinance of Heaven, none can deny. And the origin of the institution of matrimony might convince the skeptic of his error; for the only volume which gives an authentic early history of our race, declares in the outset, that in our creation, the distinction of sex was ordered as a contribution to our enjoyment, and that therefrom should follow perpetual companionship. "And the Lord God said, it is not good that man should be alone: I will make him an helpmeet for him." And after He had created woman, and given her to Adam to be his wife, Adam acknowledged the precious gift with the profoundest gratitude. He said of her, "This is now bone of my bones and flesh of my flesh;" and the sacred volume adds, "Therefore shall a man leave father and mother, and shall cleave unto his wife; *and they twain shall be one flesh.*"

Love and Marriage are Natural.

Marriage is also sanctioned by the very laws of our being. It is just as natural to love and marry as it is to breathe. The world loves; the world marries. Misery, you say, grows out of married life; so does the purest, deepest enjoyment. The misery is nothing against marriage itself, but against wrong, hasty, foolish marriages. These every mother, every father, should guard against, yes, and young people themselves.

We cannot be too well acquainted with those qualifications and organizations capable of transmitting the qualities which we most desire in our children. As perfect children are the most valued and beloved, as the laws of reproduction are unchangeable; and as perfection is only in proportion to obedience to these laws, in order to secure our highest wishes, we see the almost imperious necessity of our not only understanding, but complying with these requirements of nature.

If we were as honest and careful in choosing companions for life as we are in business transactions, we should not then run the risks we now do ; and the majority of those who marry would be comparatively happy ; because each would be better suited, much more satisfied—would know better what to expect of the object of their choice ; since they would have a better understanding of each other, and would be less liable to discord.

Causes of Unhappy Marriages.

Married as many are, at the present day, and have been in years past, they are more liable to commit crime than they would be if single, and their children grow up to curse them for their existence ; when, if they had been properly married, they would have made the best of companions and parents. The evils consequent upon these unphilosophical and unscientific marriages, result in much of the social and domestic disarrangements, quarrels, separations, and divorces of such frequent occurrence in society ; but, guided by judgment and science, there is but little room for disappointment or dissatisfaction. Among qualifications that might be mentioned, a few only will be noticed.

A Well-Developed Mind and Body.

To those who would be true companions and parents, a sound mind and body are indispensable. Nothing is done as it should be without them ; as in after life the first movements will be regretted, while they will necessarily be destined to a course of life, which to them is a source of continual annoyance, if not dissatisfaction. The above qualifications are necessary because a full, complete, and healthy action of all the functions of the body and mind, is necessary in order to discharge the duties which almost inevitably fall upon married persons.

The natural duties of man are never in advance of his natural qualifications ; and those who hurry, force, or try to outdo nature, do so, much to their disadvantage. Nature's time and ways are the best ; and those who are premature in their plans in the commencement of

life, are very apt to find a premature decay of those powers they then call into action. It is almost an every day occurrence that persons, particularly females, hurry into married life before they are fully developed, either mentally or physically, and before they have either judgment, reason, or experience.

No precise rule can be given when every person ought to marry, only that none should think of so doing, until they have arrived at maturity. Both the mental and physical powers of some are developed many years before those of others ; yet, as a general rule, woman is as well qualified in development at twenty as man at twenty-five ; but that age is rather early for the majority.

The Educated Woman.

Woman, after marriage, as a general thing, enter soon upon the duties of a parent ; and, as society now is, has very limited opportunities for mental culture ; and, as education is absolutely necessary in order to train and educate children properly, she should, before marriage, store her mind with useful information.

A young man who marries before he has come to years of discretion, is like a mariner who pushes out to sea without a compass, or even a knowledge of it. He takes upon himself the cares and responsibilities of a family, without even thinking what they are, and much less without making preparations beforehand to meet them.

But persons should not only be old enough for a full development of their mental and physical powers, with an education adequate to their maturity, and a full knowledge of, and preparation for, all the duties devolving upon them in these near relations, but they should bear in mind that, in proportion as they are naturally deficient in any of the mental or physical elements, just in that proportion are they disqualified to discharge all the duties of married life.

As society is, and as children are brought into the world, and educated, we cannot expect many perfect souls or bodies. Yet, if perfection be needed, or desirable anywhere, it is in these relations. And from the fact that the majority of persons are more or less



"THE HEART FEELS MOST WHEN THE LIPS MOVE NOT"



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TESTING THE HEART-SCENE IN A GYMNASIUM

BY THE USE OF THE STETHOSCOPE THE CONDITION OF THE RESPIRATORY ORGANS CAN BE FULLY ASCERTAINED

imperfect, they are not prepared to appreciate perfection, if they should find it; consequently they should endeavor to select those whose imperfections would be the least inconvenient to them.

If one parent be very deficient in any one thing, it is unfortunate; but if both parents are very deficient in the same quality, it is still worse, both on their own account and that of their offspring.

Self-government and Discipline.

Without some restraint, a family is like a horse without a driver or a bit, a ship without a rudder, a church without a priest, a nation without a ruler, or a day without a sun. Proper restraints are as necessary as a table in a kitchen, or chairs in a parlor.

The evils of green wood, a smoky house, a scolding wife, and crying children, are not half as bad when they are all joined together, as the absence of self-government and mental discipline; for, without them, we have all the above-mentioned evils, and in fact more; for in domestic arrangements there would be a want of every thing that is convenient, appropriate, and desirable; an abundance of every thing as it should not be, and nothing as it should be. Self-government is absolutely necessary to government in a family; and if as parents, our own minds are not trained and disciplined, we cannot succeed in training and disciplining those of others.

Without these qualifications a family is always on the extreme. You never know where to find them, or what to depend upon; "they are full of variableness and shadow of turning." Easily carried away by every change and tide of doctrine; not having the power to regulate their own affairs or to steer their own course through life, they allow all their neighbors, who wish, to help them; one day listening to the advice of one, and the next, perhaps assenting to something entirely the reverse of it; thus confusion is the order of the day; too late for the boat, too late to church, never quite ready or in season; easily tempted, easily influenced.

Without industry there is no continued success; where industry exists in a family, it is sure to thrive, and not be dependent on others

for support. Idleness produces many evils : it is the road to vice and bad habits. Industry is the mother of plenty, and makes man cheerful, happy, and blessed. Industry and good habits combined, lead to health, wealth, honor and plenty, and secure the confidence and respect of friends and associates, while idleness and bad habits destroy them all.

It matters not how many good habits a young family may have ; for, there are many which greatly facilitate business, and add much happiness to the family enjoyments. But bad habits are a stain and a curse on any family.

There are some habits which have a direct tendency to destroy connubial enjoyments ; and, where they exist, marriage should positively be prevented.

False Ideas and Customs.

Young ladies, who have formed habits connected with the pernicious customs of the day, are not the best persons for companions or parents. Their attention to extremes in dress, in fashion, their artificial airs, their studied hypocrisy, their idleness, irregular habits, false and imperfect ideas of beauty and perfection ; their tight-lacing, and their wrong standard of character, all tend, directly and indirectly, to destroy the qualities which are indispensable prerequisites for constituting good companions and parents.

That such habits do have the most alarming and degrading influences on mind and body, and are directly calculated to poison and corrupt all the sources of connubial felicity, as well as entail upon innocent offspring the most fearful calamities, diseases, and premature deaths, in numerous ways, needs no proof more clear than is afforded by the lives, characters, and confessions of thousands of those who have had the bitter experience of their blighting effects upon their own physical, mental, and intellectual endowments, and by the indescribable wretchedness they have brought into so many families and communities.

But, distressing as these revelations prove them to be, the evils do not commonly end with their own generation ; but, by a law of

hereditary descent, parents generate the same evil propensities in their offspring, and thus perpetuate them, from generation to generation ; so that from one degraded and miserable slave to vice, hundreds and thousands are ruined. So far are such persons from being qualified for the high responsibilities of the marriage duties, they are a curse to any community ; for their influence upon others, be it ever so little, is all evil, and that continually.

Preparation for Married Life.

That an education which will fit persons for domestic duties, is as necessary as it is for any other department of life, is self-evident ; yet, such an education is by many almost entirely neglected, and by a vast majority too much so. Although the marriage state is one which is designed for wise and important purposes, and by the fulfilment of which man gratifies some of the strongest desires of the human mind, yet, as a general thing, we are as poorly qualified for it by mental training and information as for any other condition in which we may be accidentally placed. We use double the means to obtain the object that we do to qualify ourselves for enjoying it when obtained.

When we speak of education as being adapted to the social department, we have special reference to a well disciplined mind, to an experimental acquaintance with domestic labor, and a familiar knowledge of household matters and duties ; young women should be able to sympathize with those engaged in domestic affairs, by an individual experience in the same matters.

Every Girl Should be Independent.

Every young lady, whether she be rich or poor, especially if she anticipates marriage, should be as familiar with the necessary duties of the family, as she is with the keys of her piano ; and much more than with the fashionable acquirements of the day ; for none can fill the sphere of a companion and parent, until they are intimate with household labors, are capable of arranging family matters, and supply-

ing their own wants, particularly in the line of making garments, preparing food, etc.

It will not do in this country to depend upon the slightest tenure of property ; for it is an everyday occurrence that wealth takes wings and flies away. To be dependent upon the milliner, the cook, and domestic, (which in our cities are mostly of the lower, and ignorant class,) is a slavery to which a truly independent mind would never be willing to submit. And yet scarcely a day passes over our heads, but many young women take this too often unhappy step, without understanding even the common rudiments of housekeeping.

Young men, with their eyes blinded by beauty and wealth, or accomplishments which are generally laid aside and forgotten after marriage, frequently hurry on the wedding day, but find that they have but a painted doll, a mere automaton in the great drama of life. Young men also are frequently through ignorance as poorly qualified to discharge their duties in the domestic department ; and when thus disqualified, they are thereby incapable of adapting themselves so agreeably, or to appreciate the peculiar feelings of a wife in her various circumstances.

There Must be Home Education.

They will, as husbands, expect as much at one time as another, and fail to make those allowances which the nature of the case requires, being less qualified to adapt themselves to her in the various changes of circumstances. Where this is the case the wife pines away, grows pale and languid, and not unfrequently becomes discouraged and broken-hearted.

What should we think of a man who, the first time he steps on board of a vessel, declares himself able to take command, pushes off, and raises sail for a foreign port? All would join in saying that he was rash and unwise, and that he ought first to make himself acquainted and familiar with the rigging of the ship, and the use of all the instruments on board. No one will hesitate in predicting to him a rough if not a dangerous passage, and would be unwilling to embark with him. How many are there in married life who make a

fatal shipwreck of all they possess, simply because they do not understand how to steer and balance the matrimonial ship.

To manage a family well, and adapt one's self successfully to a companion, is as much an art as anything else, and requires as much preparation, skill and judgment, and much more presence of mind, patience and common sense, than any other conditions of life.

Parents do their children a great injustice by neglecting the instruction of their sons and daughters in these matters, which are so intimately connected with their future success and happiness in this life. The details of that education cannot be dwelt upon here.

Children are Not as They Make Themselves.

We should marry with regard to posterity, as well as to our individual happiness. The fact that society is affected by hereditary influence, is established beyond a doubt. Every farmer in the country is prepared to admit the general principle as applied to animals; and, every one acquainted with history, is obliged to admit the fact as applied to man. Children, then, are as they are made by others.

And as the laws of production are unchangeable, and the mental and physical organization the necessary result of law and those laws in the hands of parents, it lays them and all who expect to be parents, under strong moral obligations duly to appreciate the result of their labors.

If society were not affected by hereditary influences, and if the next step after marriage were not parentage, then it would be less important to think of, or care for the future, in those particulars. But as things now exist, it is not sufficient for those who intend marriage to consult their own individual happiness, but they should also consult that of posterity. If this were the case, each generation would be an improvement on preceding ones. At present, however, the majority of society, from all appearances, live only for selfish purposes, regardless of the consequences to posterity; and thus, the improvement of the race is much retarded, man is degraded, and God dishonored.

CHAPTER II.

ADVICE TO THE UNMARRIED.

Marrying to Please Others—Stigma of "Old Maid," or "Old Bachelor"—Sound Judgment Needed—"Petticoat Government"—Both Parties Should Do the Courting—Flirting as a Pastime—Fashion and Domestic Duties—How Romance Disappears—Dram-Drinking Husbands—Marrying for Money—Long Courtships—Temperaments That are Too Much Alike—Like Parents, Like Children—Prowling Fortune-Hunters—Marrying Out of Your Natural Sphere—Evils of Coquetry—Defective Education—Exciting Unhealthy Passions—Harmonious Development of the Whole Woman.

TO one and all we would say, do not marry unless you love, and do not love unless guided by reason and judgment. Do not marry contrary to your own judgment and inclination, merely to please your friends ; for this reflection does not bring domestic peace when you find that you are confined to one not at all congenial to your feelings : your happiness, in married life, will depend on your union, and not how it was brought about.

Being so very accommodating as to give your hand and virtue to a man without your love, because you cannot bear to see him weep when refused ; or because you are afraid of hurting his feelings, if you refuse him, is a spirit that should not be recognized among human beings where their own welfare and that of posterity depend on a different course of conduct.

"A Crooked Stick At Last."

Do not marry then in any case to avoid importunities and puerilities, or to save the tears and feelings of others ; as selfishness, if it can be so called, or rather self-love, is justifiable in this case.

Do not marry because you think it is the last opportunity. To refuse good offers in hope of obtaining those more eligible, and then through fear of living in single blessedness, to accept because you think you will have the "crooked stick at last," is like a man grasp-

ing a straw to save himself from going over the dam. Never marry to get rid of the stigma of being called an old maid, or an old bachelor.

It is an honor and a credit to many, that they have had prudence and sense of duty sufficient to control their feelings, and to enable them to remain single.

Many, by not consulting their organization and qualifications for married life, have brought great evils on themselves and also on posterity, simply to show the world that they can marry, and thus remove the reproaches (that many fling) of a single life.

Desperately Anxious to Get a Husband.

Said a certain lady, "I would not live single if I had to marry the greatest 'roue' in the city." That was weakness and folly.

In this all-important step, which has to do with your own individual happiness particularly, allow your friends and enemies to give you facts, and be thankful for them, but think for yourself; exercise your own judgment independently. By judgment we do not mean the calculations of mere intellect, but the whole mind, embracing the feelings, the sentiments, and propensities. When the consent of all these faculties of the mind has been obtained, then it is certain you are under a moral obligation to marry, regardless of opposition.

Do not marry with the determination to rule or not to be ruled. Scarcely anything appears more foolish than this absurd feeling of "I am not to be dictated to," "I will have my own way," "I shall not sign away my liberty, I can tell you," etc.—the lady afraid to yield, for fear complete submission will be the result; the husband, from dread of appearing to be under "petticoat government."

Domestic Enjoyment Destroyed.

A civil war of this kind puts to flight, most effectually, all hope of domestic enjoyment. It is, invariably, the growth of foolish pride and morbid, little independence, as far removed from real dignity as light from darkness—oftentimes exhibited before marriage in persisting in certain actions or habits when their suspension is desired.

It cannot be too strongly impressed on your minds, that "mutual forbearance is the touch-stone of domestic happiness." "The angel of the marriage covenant bears the inscription on each wing, which he folds in sorrow when the admonition is unheeded."

Do not be so modest as to let one do all the courting, the other replying only in monosyllables; for very frequently the tongue becomes more pliable, or loosed when damages cannot be repaired.

Playing the "dumb belle" and silent lover, is a very silly mode of transacting business. No; it is your duty to unfold your characters in their true colors to each other. In the married state, it is your duty, and should be your pleasure, to sympathize with and console each other, and thus beget a winning and soothing confidence that does much towards making home desirable and happy.

Coquettes and Flatterers.

Do not marry a coquette or a flatterer. A coquette has no heart, and a flatterer but a hollow and deceptive one.

Do not trifle with your affections, by keeping company as a matter of curiosity or of opposition.

Writers have dwelt with much effect upon the evils produced on the intellect by novel reading, but, the effects of literary trifling, bad as they may be, fall far short of the ravages of hydra-headed social dissipation. Parties, routs, the strained and tender compliment, the sigh and protestation, the coquetting and flirting practiced as mere pastime, inevitably destroy true affection. Persons who have passed but one season in amusements of this sort, have generally rendered themselves incapable of being influenced by natural and true affection—their feelings have been completely seared.

Persons who have been drilled in all the tactics of fashion, should be resolutely avoided, nine cases in ten. They have become susceptible of but one love—the love of themselves. The plague has tainted their blood, producing certain death to all the warm and generous sympathies that should issue from the cup of gladness into the secluded bosom of the family.



THE LOVERS' RETREAT



THIS ENGRAVING SHOWS AN ANIMATED SCENE OF ENJOYMENT. THE SWIMMERS REACH THE WATER BY USE OF THE SLIDING BOARD, THUS GIVING ADDITIONAL ZEST TO THE SPORT

Do not be so precise and regular in the time that you make your visits—both parties, thus prepare for such occasions by embellishing and rendering their appearance foreign to nature ; each parades his or her good qualities to the front, and shows how pleasant, kind, agreeable, and polite they can be when they are prepared for it.

From using these forced and artificial means to entertain each other, an acquaintance is made with one's abilities for pleasing only, and not for displeasing ; the disagreeable traits of character, not being necessary, are concealed ; but the occasion over, they manifest themselves in right good earnest, and when it is entirely too late—the words “for better or for worse,” having been pronounced.

In your courting days you had the “better,” but now you are prepared to appreciate the meaning of the latter term.

It is a positive fact, that men and women are not heroes and angels, except upon the pages of a romance.

When you are married, you will be obliged to come in contact while your faces are flushed by exercise, dresses disordered by labor, tempers a little ruffled by trifling circumstances and annoyances—when the toilet is not prepared with extra care, and many other trifles connected with “little responsibilities,” establishing beyond a doubt that earth is not heaven, and poor human nature somewhat else than poetry.

Love Should Not be Stimulated.

These things are so ; and you may as well study each other in these situations, as when “dressed up” and seated in the parlor. In the one case, you are liable to be “taken in ;” and in the other, knowing what to expect, disappointment cannot creep in. Contentment must reign—giving a fair opportunity for happiness.

Do not excite your love by foreign stimulants. The influences of love and wine should never be united. Men, when under the excitement of intoxicating liquors, are not in full possession of all their faculties : they have excited their animal propensities, and by so doing, have rendered the manifestations of their feelings brutal. There is no woman of sense and purity throughout the land, but must, having the

knowledge of the debasing influences of ardent spirits, the foul and demoniac crimes which have been committed under the auspices of drunkenness, view the attentions of persons under this animal excitement as an insult of the blackest kind.

Errors to be Avoided.

If you are very poor, do not marry a person very wealthy, merely on account of his or her wealth, unless you wish to act the part of a servant, and to live with the continued reflection that you are eating another's bread and riding in another's carriage.

If you have insane or consumptive tendencies of body, do not marry one who has the same, unless you wish to bring upon yourself, your family, and posterity, all the evils of hereditary disease.

Do not be so long in courting as to change your mind, or so quick as to be rash, or ignorant of the character you have chosen. If you have no love in your soul, do not marry unless it is with one of a similar disposition.

If your mental or physical organization is extremely susceptible to impressions, do not marry one of the same extreme or of the opposite order. There should be a tendency to the medium line ; if an organ or function is very large in one, then it should be less in the other, so as to have a restraining influence ; yet, it should not be so small as to be disgusted with the extravagant manifestation of it. If one has an organ very small, the other should have it a little larger, so that it may not be deficient in the family ; and also that it may serve as a stimulus for the one in whom it is weak.

Variety is Desirable.

A long article might be written on this subject, and a detailed account of the manner in which each of the developments should rank, might be mentioned ; but that is not necessary, as the subject addresses itself to the common sense of every one.

Variety is at times agreeable and even desirable ; yet extremes in any of the arrangements of nature, or in two separately organized

bodies, scarcely ever harmonize in action or in that adaptation necessary to produce uniform results.

A gentleman, who thought he understood human nature very well, the motives of action, etc., had very small acquisitiveness, and, in his selecting a wife, looked for one with the organ large ; but, when they were united, this was the source of trouble and contention ; for, she took all his earnings, and was unwilling that he should expend a single cent beyond his actual necessities. This state of feeling increased to such a degree that he separated from her, and now lives alone in the world, unhappy and desolate, convinced that extremes do not always produce happiness.

This law of harmony and balance should be recognized, not only for the convenience of the parties concerned, but for the sake of posterity.

What Kind of Children Will You Have?

The organization of children depends on two things ; first, the organization of the parents ; and secondly, the influence of circumstances on the minds and activity of the various faculties and functions of those parents before conception, and particularly afterward on the part of the mother.

If, then, both parents have the same function very large or very small, the child must necessarily partake of that extreme, unless a change is produced by the force of circumstances. If both parents are idiots, the child will be idiotic. If very nervous or consumptive, the children will be so disposed. If conscientiousness, firmness, self-esteem, or any other organ is very small in the parents, they will be so in the child, unless it is rendered large by the great activity of these faculties in the parents. If cautiousness, secretiveness, destructiveness, amativeness, or any of the animal propensities are very large and active in the parents, they will be manifest in the children.

If you are very rich, select your companions yourself. instead of permitting another to choose for you ; so that you may not be troubled with the reflection that you were selected for your wealth.

A young lady of royal blood, from the south of Europe, who was very wealthy, accomplished and beautiful, traveled in this country in the garb of a servant or companion, for the purpose of making her own observations and selecting her friends without her name, rank, and wealth being known; fearing that they might be the means of attracting attention, and draw a crowd of flatterers around her, regardless of her own natural qualities, which was not a very pleasant reflection. She was a true unsophisticated child of nature, traveled extensively, and enjoyed herself highly.

A gentleman, appreciating her native talent, made love to her and they were married and settled at the south. She had the satisfaction to know and experience that she was beloved for herself alone. He was made thrice happy, when he found, in addition to her own personal and acquired qualifications, all other things desirable. They lived in the enjoyment of almost uninterrupted felicity for many years. After his death, she returned to Europe to grace again the circles of wealth and intelligence, which she had voluntarily left for a season. Had she followed some other course, she might have been the dupe of some fortune-hunter, prowling over the country.

Consent of Parents.

Be sure that you have the confidence and sanction of the parents before you proceed with your negotiations. To secure the affections of a young lady, and make arrangements to be married, and then ask the consent of the parents and be refused, is quite an unpleasant predicament in which to be placed. In this case you are left to one of two alternatives, either of which is unfortunate.

To marry contrary to the wishes of friends and parents, or sacrifice your love, both of which might have been avoided, if the necessary precautions had been taken in season. Do not marry so much above or below your sphere, as either to secure the contempt and the reproaches of friends, or fail to adapt yourself to the peculiar condition of your companion.

Finally, do not allow any one faculty of the mind, any one condi-

tion of the body, any one favorable or flattering remark, the enthusiasm of the moment, or the excitement of passion to balance all other considerations—thus bringing about a partial union, and securing the possibility only of imperfect happiness.

Acting from the Highest Motives.

Those individuals who are governed by selfish motives in these matters, will resort to dishonest and improper means to accomplish their object. They have not a sufficient amount of conscience or principle to regulate and control them: the consequence of which is, there can be no confidence placed in them; they are liable at any and all times to go or be led astray, and are especially unfit to assume the weighty responsibilities which devolve on heads of families.

Persons of this character should be resolutely and determinedly avoided. From the existence of such men and women in society, can be traced the origin of the deception, pretension, falsehood, flattery, assumed piety, strained politeness and artificial endeavors to entertain each other while together, which may be denominated the reefs and shoals of the sea of matrimony.

Trifling with Affections.

Many unprincipled young men of fortune, leisure, and accomplishments in our cities, spend much of their time in female society, using all their faculties and powers of pleasing with apparently honest intentions, labor assiduously to secure the affections of young ladies, and afterward make their dignified and lofty boasts of how many beautiful and charming young ladies are crazy after them, even if they do not proceed farther and trifle with their affections in the basest manner. Such men, or apologies for men, deserve to be branded with the blackest marks of infamy, the most indelible sign of disgrace, meriting nothing but obloquy and contempt.

Young women, too regardless of consequences, sometimes thoughtlessly turn coquettes, present their charms and bright attractions, use their best endeavors, exhibit excessive devotion and exclusive affec-

tion, and by these means decoy and lead astray, if not absolutely ruin, many an honest, worthy young man. The hearts of such ladies exist but in name; they have long since been dissipated in thin air: they are only worthy of becoming the wives of the soulless person described in the last paragraph.

The world is full of this reckless and unprincipled way of titling with the most ardent, influential and endearing feelings of our nature.

Source of Untold Evils and Misery.

Were the evils brought upon society, families and individuals by this extensive but very pernicious course of conduct thoroughly investigated and dwelt upon, we should be presented with the real first cause why there are so many lewd men and women, so much vice, immorality, and licentiousness in our cities—would unfold the origin of the wretchedness and despair of miserable thousands, and expose the causes of many an early death.

It is the duty of every one, and God holds them accountable for the performance, to use their personal influence in removing unhealthy tendencies, particularly of the kind to which we have alluded.

As young people are now educated, many are not capable or qualified to discharge the duties which necessarily present themselves in the marriage relations.

The primary powers of their mind, their inclinations and passions, however, are not changed or modified to suit their abilities.

They are urged on by the blind impulses of their nature, to the altar of marriage, no more prepared to fulfil their solemn vows, or to discharge their duties, than is the mariner to navigate the broad surface of the mighty ocean without chart or compass.

Sickly Creatures.

The education of young ladies, especially, is very defective in many circles, particularly among the more fashionable, wealthy, and artificially accomplished.

Instead of being taught to work and help support themselves,

thereby forming habits of industry and economy that are of invaluable service in after life, and securing health, hilarity, vivacity, and sprightliness by the free and ready exercise of muscle and mind, they become weak and sickly in their bodies, as well as peevish and fretful in their actions.

Then parents become their slaves, their very drudges, and they are allowed to grow up in a debilitating and enervating idleness, their bodily powers only equalled in puerility by their mental—unable to take care of themselves or boldly meet difficulties which some unforeseen event may cast in their path, fitted only for toys and playthings, not for companions and confidants—the whole extent of their useful acquirements being ability to dress fashionably, behave genteelly, walk and dance gracefully, play upon the piano very beautifully, talk very softly and sweetly, to ridicule the idea of coming in contact with any of the commonplaces of life, pore over the sickly and trashy tales of a magazine or novel, and amuse the company by a display of their personal attractions, natural and unnatural, exciting an unhealthy, if not an immoral influence over others.

Artificial Accomplishments.

Or if, perchance, they work, it is merely to show their taste upon some article of dress designed to adorn their too artificial bodies, consulting neither health nor convenience, or, perhaps, to put on their gloves and dust the parlor, possibly to set the table, and yet very anxious to marry without understanding the rudiments of house-keeping.

Such wives and mothers should be scarce, and yet such a system of education is encouraged by the other sex, who are by far the greatest sufferers, being more fond of their wives and daughters when they appear well, even to the neglect of their families; also by paying attentions and clustering around those young ladies whose dress is most “baby-like.”

The true principles of education, founded upon athletics and physiology, would say, cultivate and improve the physical powers to

the utmost, so as to secure health of body, strength of constitution, and the power of becoming parents of children, not characterized by weakness and effeminacy.

Exercise the mind, the whole mind, bearing in view the fact that the brain, the material organ of the mind, is capable of being benefited by regular tasks, and of being injured by excesses, precisely in the same manner as the body can be weakened by any over-action.

Long Life and Happiness.

When the mental and physical organization of man is properly understood, and the laws by which those organizations are affected are obeyed, families will enjoy uninterrupted health, long life and uniform happiness.

Man's enjoyment in this life depends more on the proper exercise of the social feelings and their gratification in the domestic relations, than on any other condition in life. For him to enter upon these duties, and assume the necessary obligations without being thoroughly qualified and prepared, would be as great a sin and violation of duty as for an ignorant man, unacquainted with the principles of Christianity, and not enlightened by grace, to attempt to teach the way of salvation.

We should change our situations and enter into the matrimonial relations solely with the intention of becoming more happy and useful.

It should be looked at, reasoned upon, and spoken of, as an honest and most important business. To treat serious subjects in a light, trifling, nonsensical manner, is quite injurious, and should be reprobated.

We should do it with an eye upon our mutual and individual happiness, remembering that perfect happiness can arise only from the proper adaptation and exercise of all our natural powers, socially, morally, intellectually, and physically—consequently, we should consult all of them, and gratify as many as possible. And above all, we should do it with the reflection that from three to six generations of our descendants will be directly affected by the choice we make,



"A LOOK THAT SEARCHES SECRETS HID AWAY



"'TIS EXPECTATION MAKES A BLESSING DEAR,"



AN EVENING'S AMUSEMENT WITH THE GAME OF PING PONG
IT REQUIRES INSTANT DECISION AND VERY QUICK AND DEXTEROUS USE OF THE RACQUET



"NOT ALL POEMS," SAID RUTHERFORD, "ARE WRITTEN IN BOOKS; I'VE SEEN LIVING ONES
AND CONVERSED WITH THEM."—AINSWORTH

CHAPTER III.

LIKE BEGETS LIKE.

Effects of Hereditary Disease—Mental or Nervous Organization—Living too Fast—Bilious Temperament—Coarse Muscles—Sluggish Brains—The Mental Dwarfed by the Physical—Well Balanced People—Perverted Passions—Violation of Physical Laws—Society in Upheaval—Young Ladies and Their Associates—Parental Responsibility—Transmitting Disease and Death—Sins of Parents Visited on their Children—Perfecting the Race—The Characteristics of the Child Determined by the Parents.

AS the condition of man now is, many are not proper subjects to hand down to posterity a healthy, happy family. Persons who labor under hereditary diseases of any kind are poorly qualified for becoming parents ; for by so doing they multiply sorrow, suffering and early death.

If persons affected with any hereditary disease marry with the intention of becoming parents, they should pay strict attention to the laws of physiology and marry those only who are particularly well fortified in those qualities in which they are deficient—those having a strong and well-balanced constitution, a good stock of vitality, and an active and energetic mind.

The children, in this case, will be like or resemble the more active and healthy parent, and be much less affected by the one diseased than they would if both were diseased or unhealthy ; or than they would be if there were no counteracting qualities in either of the parties. Persons of the same physical qualities in the extreme should not marry.

Marks of the Mental Organization.

The mental or nervous organization may be known by a delicate frame, sharp features, thin skin, fine hair, sparkling eyes, quick movements, rapid speech, joined with a great desire to read, think, and gratify the intellectual powers generally.

If the nervous organization prevails, the mind is predominant in

power and activity, and the constitution suffers severely from the constant drains made on it. Such persons mature early, suffer or enjoy in the extreme, lead a brilliant but short career, and generally find a premature grave.

Two persons uniting with a predominance of this organization will live too fast, be too extravagant in thought, word, and deed, will enjoy and suffer in the extreme, carry everything to excess, devote themselves too exclusively to the exercise of mind as such, and will be restless, uneasy, feeble, irregular, uneven and inconsistent.

Precocious Children.

Children of such parents are generally few in number, dwarfish, puny and "too smart to live." The ranks of the insane are too frequently increased from families of this organization; and when young they consequently require double the care and attention, and are much more dependent than other children. They are endowed with feelings so keen, and susceptibilities so acute, that their existence is almost a burden for the want of the ability to look on the trials, privations and hardships of life as though they were prepared to meet them. Such families soon become extinct, and "the places that once knew them, know them no more."

The motive or bilious organization comprises the frame-work of the body, the bones and muscles, the moving part of man, the house which encases the vital functions.

The indications of this organization, when greatly preponderating, are solid bones, hard muscles, firm flesh, close and large joints, large and irregular features, dark hair and complexion, heavy expression and slow movements. Such persons are difficult to excite and hard to restrain; have strong and well-fortified constitutions; are generally well-qualified to resist foreign influences, both mental and physical. Such persons are our hewers of wood and drawers of water; are capable of sustaining the fatigues and hardships of life: they do the coarse heavy work, are backward in youth, tenacious of life, and struggle in death.

Two persons with a predominance of this organization united in marriage would be far behind the age and the spirit of the times; would always be in the rear, and would act as machines or automations for their neighbors. In them there is more ability to act than to plan; more strength and toughness than refinement and sensibility.

The children of such parents will be hardy and healthy, but awkward, homely, backward, and never in their element except when the harness is on; real plodders through life, doing all the hard work, fighting all the battles, raising all the monuments, but obtaining none of the credit. They help to make others rich, but die poor themselves, and are soon obliterated from memory.

They are the real sinews of the land, but rarely exert a moral and intellectual influence. Their standard is physical, their exertions are physical, and their attainments physical.

This organization joined with the nervous or mental, gives vigor and strength of mind and produces greatness and power of intellect.

Full Chest and Broad Shoulders.

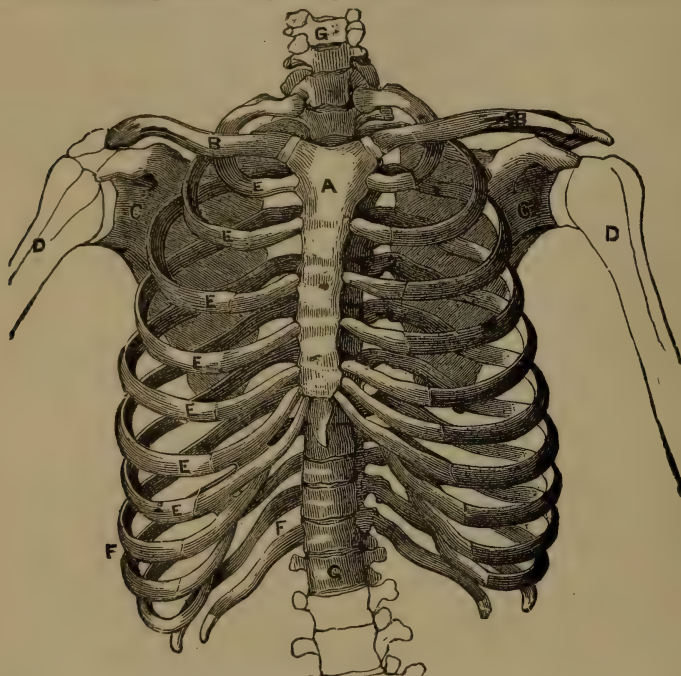
The vital organization is the combination of what is generally called the sanguine and lymphatic; it has reference to the thoracic and abdominal regions of the body and may be known, when in the ascendancy, by a large, round, plump body, full chest, broad shoulders, round limbs, strong pulse, large base to the brain and lower portion of the face, with florrid complexion, sandy hair, and a healthy, social and animated expression. All the vital organs, those on which life depends and is generated, are large and active.

Persons with a predominance of this organization place a high value on life and its pleasures, enjoy all there is to be enjoyed, sleep soundly, breathe freely, eat heartily, and like to partake of the luxuries of the table.

Their motto is: "Live while you live." They are fond of excitement and amusement; always busy, yet do not trouble themselves about hard and steady work; more disposed to oversee others and give orders than to obey those of others. They frequent social gath-

erings, have a predominance of the feelings and passions which, when perverted, render them violent and passionate.

Their feelings are tender, sympathies lively—are very sensitive and susceptible to foreign influences and change of circumstances. They act upon the high pressure principle with force and impetus. Two



NATURAL FORM OF THE HUMAN THORAX.

- | | |
|-----------------------------|------------------------------|
| A—Sternum (Breast-bone). | E—True Ribs. |
| B—Clavicula (Collar-bone). | F—False or Floating Ribs. |
| C—Scapula (Shoulder-blade). | G—Vertebrae (Spinal Column). |
| D—Humerus (Upper Arm-bone). | |

persons united with a predominance of this organization will be too impulsive—put on too much steam in proportion to their freight—are too easily carried away by the impressions of the moment—too little under the restraint of the controlling elements, and when excited are too warm, ardent and passionate—are too much under the influence

of the feelings—may evince considerable intellect at times, but will have no uniform and steady mental action.

We never see persons of this class close students ; neither do they have much patience or application of mind. The first thoughts are generally their best ; they do not trouble themselves much about mental reflections or physiological investigations ; they lack balance of power ; have too much of the animal and not enough of the mental, and consequently act and live for present enjoyment, without reference to future results.

Making an Idol of your Stomach.

If the digestive functions (which are a part of the vital) predominate, then the person becomes dull, indolent, corpulent and gouty, especially in advanced life, after having retired from active service. Children born of such parents will be passionate, difficult to control, dull scholars, extravagant eaters, units and capers in society, mere non-entities, very liable to yield to licentious and intemperate habits, to violate law and good order, to exert a demoralizing influence over others, to live and die degraded, and are too frequently very inferior in intellectual and moral capacity.

It is not well to have any of these conditions of the body developed in the extreme, as it will be very unfortunate, both to the parents and the children for two of the same extremes of organization to be united, and equally so for two of the opposite extremes ; for they will labor under many inconveniences which education or effort on their part cannot overcome. Their children will be imperfectly organized and subject to extremes ; they will always be regarded as creatures of circumstances and the folly of their parents. Their existence would, in fact, exhibit only the phenomena of vegetable life.

The Golden Mean.

A balance of all the temperaments is the most desirable ; and what one is deficient in let the other have to a sufficient degree to act as a counterpoise ; by this means uniformity and evenness of action may

be inherited by your children, instead of their becoming but second editions with numerous additional illustrations of their parents' original imperfections.

If persons will arouse from their lethargy, and make themselves thoroughly acquainted with the theory and philosophy of the temperaments, and put in practice the knowledge so obtained, the cornerstone of a great social reform will be laid, which must produce more blessings, dissipate more evils, and advance mankind toward a state of perfection with greater rapidity than any other measure of the day.

Young gentlemen, or men having formed intemperate and licentious habits before marriage, are very liable to retain them, and should, therefore, receive no encouragement from the ladies. If they value the welfare of their family, wish to secure health and happiness in their union, and pay due regard to the moral improvement of society, they will, one and all, unite in reprobating by their actions in the most positive manner all tendencies of this nature.

Follies of Dress.

Young ladies who devote their time to leisure amusements and the follies that invariably attend them, should be regarded as entirely unworthy the notice of those young men who have any regard for a healthy and happy family.

They are entirely unqualified to discharge the duties of a mother and companion in a proper manner; and it is to be hoped that measures will be taken which will have the effect more thoroughly to open the eyes of all on this important subject. Do not allow yourselves and your "fair loved ones" to be victimized any longer, even if it be done in obedience to the imperious mandates of fashion, when that obedience renders them incapable of transmitting to posterity that vital energy and mental power necessary for long life or distinction.

It is true that there are many persons in society of corrupt and unnatural tastes, who are gratified by existing modes; young men, and married men too, there are, who encourage such fashions and

habits; they like, forsooth, to be entertained by young ladies of leisure and accomplishments, who have small waists and bare shoulders.

But, we would ask, who are these men? What are their characters, habits, and principles? Inquire here, and turn your investigations from the discovery of what their connections are into this channel. And mark the words. You will find that they are men of perverted passions, and generally accustomed to intemperate or licentious associations.

You will then perceive, and what emotions of shame and mortifi-



NATURAL FORM—UNLACED.



DEFORMED BY LACING.

cation ought it to produce, that it is their animal natures and propensities which you are laboring so assiduously to please; while very few, indeed, are the efforts which you make to please by gratifying their moral and intellectual faculties.

Let young men encourage honesty and industry, and a great change will be wrought in society. What a difference in our families and children! What great improvement may we not reasonably expect! Let things go on as they now are, and in a few centuries the result will be seen, and felt, too, in this country by a small, dwarfish, consumptive and incipient race of mortals—on whom will devolve the

honorable task of perpetuating the political existence, name and constitution of this republic.

How are we situated at the present time? Why in some circles, and those not very limited in extent, every third woman is an invalid, and every sixth male also. They labor under dyspepsia, particular weaknesses, and many other diseases of the kind—all produced by a violation of physical laws. The only true means of saving this country from dismemberment, decreasing influence, and from being a nation of hospitals, is by commencing at once a great social reform.

Society Agitated by Great Questions.

Examine the condition of the times and see what can be foretold by their aspect. At what stage of the world, and at what period, as far back as our knowledge extends has there been a similar upturning, loosening and stirring up of every principle and institution, moral, social, political and intellectual? Every one is beginning to inquire into the abuses, visible and invisible, with which society is pregnant. Every one feels an indistinct prompting for a change. All are looking from the quarter from which it must emanate.

When has the religious world been so distracted by dissensions and differences of opinion? Were there ever as many changes and innovations in theology as at the present time? When did science unfold truths of greater importance and in greater profusion than at this moment? Have the political world and the political institutions of the day ever been in so strange a situation as they are now? When did our various systems of education differ as widely and hang as loosely together as they now do?

Overturning Old and False Systems.

None are stamped with the character of permanency, for all seem aware that errors will and must be reformed. Does not everything appear to be hurrying into one grand reservoir, as it were, where all principles shall become united in one chaotic mass? Theologians, philosophers and politicians may, from the purest motives, do all in



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GYMNASTIC EXERCISES—APPARATUS FOR DEVELOPING THE MUSCLES



THE REGATTA

GREAT PUBLIC INTEREST HAS BEEN AWAKENED BY THE REPEATED EFFORTS OF SIR THOMAS LIPTON TO CAPTURE THE CUP
HE D MORE THAN FIFTY YEARS BY THE NEW YORK YACHT CLUB



FASHIONABLE CHURCH WEDDING—BRIDE AND BRIDEGROOM
LEAVING THE ALTAR



SOCIETY PROMENADE AFTER SUNDAY MORNING CHURCH SERVICE

their power to reduce this chaos to order, but it will be of no avail. The commencement, to be complete and thorough, must be made farther back than their peculiar spheres of action ; for all these various systems are mere offsets from the social circle. Political government originated from patriarchal authority. Education is affected materially by social manners and customs. And so with all other institutions—they proceed directly or indirectly from the family circle.

Let the reform be commenced here, on the principles of physiology and health, and a gradual process of regeneration will be entered on that will produce the most salutary effects upon the habits, characters, motives and actions of all mankind.

Parents and guardians must feel the full force of the obligations which rest on them, and, in consequence, train their children for true happiness and usefulness. Young ladies, in particular, should be careful with whom they associate and whom they encourage—for it must be borne in mind that it is not every talented, wealthy or fashionable young man that will make the best husband and father.

Responsibility of Marriage.

In these matters, rest assured we cannot be too careful. The act of marriage is the most responsible in which we can engage, as connected with our own happiness in this life, and through us to those who shall exist after our death. No individual is a proper subject to become an agent for the transmission of soul and body to posterity unless he or she is free from all hereditary disease, his or her organization sound and complete, his or her mind and body free from all those habits and vices which tend to weaken our powers, debase our feelings, and render us morally degraded, and he or she in the full, regular and natural exercise of all those powers and faculties which God, in his infinite wisdom, has so beautifully and harmoniously adapted to the wants of our condition.

One sufficient, amply sufficient reason, if none others existed, why we should be thus particular, is because we hand down to posterity the qualities which we possess in the highest activity and strength.

Parents are to be blamed for the natural, primitive defects of their children, for it is an inevitable law of nature that constitutional qualities and deficiencies are hereditary. Children are impaired, and their physical structures ill-balanced, from various causes in harmony with the varieties of organizations that become united. The marriage of those who are enfeebled by age, or debilitated by disease, must be productive of little stamina in the offspring.

Sin of Transmitting Disease.

Those persons who are aware of being under the influence of a constitutional tendency to any disease have a moral law within themselves why they should not enter into a matrimonial alliance. Look at some of our families; the diseases of insanity, idiocy, consumption, scrofula, and a host of others, have become incorporated with them—regular heir-looms, transmitted from father to son, and mother to daughter, with far greater regularity and certainty than relics or property of any kind—for they may be dissipated, lost, and destroyed, but the other runs throbbing through our veins, is united with our very system, and we become disenthralled from them only by the assistance of death, the great tyrant by whom all are freed.

We could deduce illustration upon illustration which would enforce what is now stated, so that you could not violate the principle without doing your sense of right and wrong a grievous injury, from facts which have come under our own observation—when families have mourned the suicide of a grandfather, father and son, the lunacy of a grandmother, mother and daughter, and from families whose family registers of deceased members are filled with records of “died of consumption.”

Evils of Marrying Near Relatives.

Another principle that can be relied on as a cause of deterioration is a continuation of marriage in near relations. This course, when pursued by a few generations, produces imbecility, degeneracy, and inferiority in the descendants of those who were once renowned for strength and vigor.

Early marriages is another fruitful source of imperfection. The bodily powers should be developed and in full vigor.

As agents in this great and important work, it is your duty to become well acquainted with these principles. If you do not, you prove yourselves unfaithful servants; and it is through ignorance in going contrary to the laws of nature that the world has been peopled with those who live a miserable existence and fill a premature grave.

Ignorance of Hereditary Influences.

Lay it up in your memories, that we give to our children their bad heads and bodies. The Bible says, speaking of the sins of the children, "And your sins will I visit upon your children, and your children's children unto the third and fourth generations;" and you may rely on it, this is the way the child receives the curse on his head and body.

It is high time that parents should recognize their obligations to understand these sources of hereditary influences better than they do; and mothers in particular—for if they properly understood them and were governed by their principles, which have for their distinct and only object the elevation of man towards perfection, they would do far more towards perfecting the human race and ridding the world of vice and immorality than all the benevolent and moral reform societies in existence.

A Lesson from the Animal Kingdom.

Take the admitted fact that the stronger and weaker faculties of the parents are transmitted to the child in similar proportions, and what an easy matter it would be for us to bear in mind those particular qualities which would be most desired in order to give balance when we select our partners for life. Either there are laws, and cause and effect in this matter, or there are not. It is a certainty—a matter which can be wholly understood and advantage taken of it—or it is mere chance.

If it can be shown to be capable of demonstration, and that fortune or chance does not direct it, every one must immediately admit the

paramount value of these principles, and feel the necessity of acting in accordance with them.

The principle is admitted in full and practiced on with eminent success in relation to the animal kingdom, as every farmer and individual of any practical information whatever is aware. The natures of animals, so far as they can be operated on by these general truths, are precisely similar to that of man, whence it follows they must be equally applicable with regard to him.

If there be a law in these things then it is a fair inference that, in exact proportion as the parents are perfectly organized, physically and mentally, and in the full exercise of all the faculties of their mind and body, so will be their offspring; and that imperfection will be the result in precise proportion as the parents are imperfect, defective in proper exercise, or fail to comply with these rules which govern all organic matter.

The truth of the matter is, you might as well expect sixty or a hundredfold of wheat from off a barren, sterile, sandy soil, as to expect perfect children from imperfect parents.

Passions, desires, impulses and tendencies of mind, as well as special talents are given to the child by a special and particular exercise of these faculties in the parent. Both physical and mental qualities cease to grow or are not formed at all; and, in other cases, they are doubled in size and activity in consequence of the influence or impressions which circumstances have had upon the mind of the mother before the birth of the child.

CHAPTER IV.

LOVE AND PARENTAGE.

Courtship the Mere Alphabet of Love—Glory of the Wife and Mother—Sharing Common Joys and Sorrows—Idolized Children—Perfect Love and Confidence in Marriage—Animal Love and Moral Excellence—Wedlock's Sacred Bonds—Physical and Mental Sexuality—Development of Female Charms—Blushing Maids—No Necessity for Female Beauty to Decline—Decay of Health—Household Drudgery—Bad Diet and Habits—Diminution of Affection in Marriage—Uncongenial Mates—Dying Before Your Time.

THOUGH love and its accompanying charms eventuate in marriage, yet they do not terminate with it. As its ultimate object is the propagation of the race, it should last as long as we are capable either of being parents or exerting an influence on the character of our offspring; in other words, it should last as long as life. Its waning with the honeymoon would be like autumn supervening directly upon spring before the happy pair had tasted the luxuries of summer or feasted upon the golden fruits of autumn.

Courtship is but the mere alphabet of love and the wedding season its first lesson. When properly placed, love's natural tendency is to increase with years, nor ever to diminish till age impairs both it and all our other faculties together. The blushing bride, though all dissolved in the melting tenderness of gushing affection, does not, cannot, love equally with the middle-aged wife, or even the declining matron. She has not yet tasted the virtues or tasted the perfection of her beau ideal.

It is only after years of the continual interchange of reciprocated kindness and sentiments between husbands and wives—after they have ascended together the hills of prosperity and, perhaps, travelled the vale of adversity till they have thoroughly tried each other's souls, and called forth their mutual spirit of self-sacrifice; perhaps not till they have watched over each other when prostrate by sickness, and

reciprocated a constant succession of endearing offices of kindness and tokens of love—above all, not till they have become parents together—that they can be completely enamored of each other ; because it is her maternal relations which most of all endear the wife to her husband, besides making her love him inexpressibly the more for being the father of her idolized children.

True Love Lasts a Lifetime.

Perfect love also requires that perfect confidence which nothing can establish but those fullest and most diversified tests which married life alone can furnish. Mistaken they who suppose that years naturally weaken love. Animal love they may weaken ; but that blending of soul, that love of moral excellence which constitutes love's crowning perfection, and even quintessence, grows slowly, matures gradually, and reaches its zenith only after the fierce fires of youthful passion have given place to the live coals of mature or declining age. Matrimony is the very garden and paradise of love, and, therefore, every way calculated constitutionally to strengthen and perfect it, and thereby augment its every charm and sweet.

With this the experience of few may coincide, because so few husbands and wives cordially and completely love each other ; but, chosen and blessed of God this happy few ! Yours is the sweet cup that never sates ; yours the dainty luxury that never cloy, but only increases your relish while it feasts your souls perpetually on its delicious bounties ! Ye who have lived affectionately in wedlock's sacred bonds for a score or so of years can bear testimony to this. The fact that the experience of so few harmonizes with this blessed reality, only shows how few truly love. Ye, then, who have your die yet to cast, cast it in view of this principle.

To perceive how wedlock continues to improve the agreeableness of man is easy ; because by drinking in continually those softening, refining, elevating, and enobling influences exerted upon him perpetually by a good wife, he becomes more polished, and of a better disposition day by day, and year after year, till all his powers are

bedimmed by age or eclipsed by death. Much more is this true of woman.

Happy wedlock constitutionally develops both that physical and mental equality which imparts these finishing touches of perfection to her grace and elegance of manner, her sweet smiles, fascinating looks, exquisite intonations, beauty of expression, and which, in short, heightens every charm and perfection of the female character. By imbuing her whole soul with love for the masculine in her husband, because it so indescribably exalts her happiness, it makes her prize his sex in proportion as she loves him; and this arrays her in all her charms as a means of rendering herself agreeable.

The Married Woman.

Nor is this in the least improper. It is the nature and highest happiness, as well as the main constituent element of the wife and mother, both of which it perfects. Properly to know man in the person of her husband develops the feminine, and thereby augments every female charm and perfection, because it calls out and fulfils her whole nature. But the maiden has exercised only a part of her nature, nor that the most important. She has not yet fulfilled its great duty and destiny, and hence she is below the wife and matron.

Not that she should be underrated, but, bashful and blushing, she labors under perpetual restraint, which marriage removes. Sweet, lovely, is the blushing maid and the blooming bride; sweeter still, more lovely far, the full-blown matron. Let others sip the nectar of female loveliness as it gushes from the handsome features, lovely looks, graceful motions, fascinating smiles and enchanting conversation of maiden purity and undeveloped love; but let us commune with married woman. Give us the well-developed wife and mother, whether for elegance of manners, exquisite tenderness and flexibility of voice, ease and propriety commingled with freedom of conversation and those practical lessons of experimental wisdom which flow perpetually from the lips.

We admire the maiden, but we almost worship the matron, and

gather more information, as well as derive more pleasure, from an hour's conversation with the wife of forty than from weeks of chit-chat with the simpering belle of eighteen. The latter is only just beginning to put on her fair, but yet immature, forms and rich colors, while the former is fully ripened, her form filled out and perfected, her colors enriched and variegated and their flavor most delicious—every element being completely consummated.

Marriage and Female Beauty

But the opinion prevails almost universally that married life necessarily diminishes female beauty. The fact is admitted. Its necessity is questionable. One of its efficient causes consists in the loss of health generally consequent on marriage. Both the exercise and expression of love and all its charms expend that vitality which health alone imparts, and thereby enfeebles love itself, and that power by which alone it can manifest itself and its charms, besides furrowing and fading the cheek of beauty, emaciating the form, substituting the frowns and scowls consequent on pain for the brisk and happy expression of health—bedimming the otherwise sparkling eye and weakening and perverting and depraving all the faculties.

Hence the female invalid ceases to throw that interest, animation, expressiveness, soul, into her looks, action, conversation, etc., which health would enable her to put forth and impart, while disease, by rendering her looks more or less haggard and ghastly, and her intonations sorrowful or hackled, makes that repulsive which health would render charming. How much an animated walk, or ride, or frolic promotes circulation, heightens color and expression, and augments the whole collection of woman's charms, simply by rallying those animal energies which manifest both her love and her loveliness; and what this does for beauty temporarily health does permanently.

That the matrimonial, and especially maternal, relations require and consume a great amount of those vital energies is a fact attested by the experience and observation of all married women, maternal duties



A MOTHER'S CARE AND AFFECTION



"THE COURSE OF TRUE LOVE NEVER DID RUN SMOOTH"



"A MIND SERENE FOR CONTEMPLATION."



WITH THEE CONVERSING I FORGET ALL TIME,
ALL SEASONS AND THEIR CHANGE—ALL PLEASE ALIKE.

Milton

being so particularly exhausting that few retain strength sufficient to resupply the immense drain, and fewer still know how, at this period, to economize what little they have, so as to save their constitutions from utter ruin.

Hence women die by thousands after having borne two or three children, and most of those that survive become feeble or invalid, and therefore lose their charms. Still there is nothing in the relations of the wife or mother necessarily injurious to either health or beauty, provided woman has a good constitution, and then obeys the laws of life and health. On the contrary, all these relations are directly calculated to promote health and enhance beauty, for never is woman more attractive in the eyes of her husband and of man than when fulfilling the maternal relations.

How the Constitution is Broken Down.

But the cares, and too often the drudgery of the family, her almost perpetual confinement within doors, her seeing so little company, and, above all, the miserable dietetic and other habits—the worst possible for health—of most women, together with other similar causes, too numerous to mention, break down the constitutions of wives and mothers, efface their beauty, and hasten them and their charms into premature graves.

Ye wives and daughters of loveliness, therefore, who would preserve or regain your charms, preserve or regain your health, so that coming years shall only enhance your beauty and feed the fires of love with new fuel continually, so that its flames shall grow brighter and warmer as life's happy months fly swiftly on, till maturer years shall crown you with a husband's whole-souled love and a mother's glory, or fitted for immortality, green old age shall fold you up, leaf by leaf, preparatory to that angelic bloom which fadeth not forever! And ye husbands who will, can preserve, in still increasing freshness, those very charms which first swelled your bosom with emotions of tenderness and love.

The diminution of affection too often consequent on marriage still

more effectually blights both the charms and the soul of woman. In many cases the wife is less beloved than was the sweetheart; and nothing will fade the cheek of beauty, harrow the once lovely face with wrinkles, relax the elastic motion, cause the sprightly step to falter, and becloud or obscure all traces of female beauty so rapidly or effectually as the loss, or even diminution, of a husband's affections.

Escape her practiced eye, her quick-catching ear they never can, but will waken all her fears, blast her hopes, blight all her pleasures necessarily and always. Nor need we wonder. Her all is at stake—embarked for life. That lost, all is lost beyond recovery, and she compelled to go down to her grave mourning! Nor is it possible to comfort her. Say, ye blasted flowers of former fragrance and loveliness—care-worn, dispirited, heedless even of life, and preferring death to a life so completely miserable—what canker-worm is that which preys perpetually upon your inmost souls? Answer ye not?

Nor need ye renew your griefs by recounting their cause, for they are written in doleful characters upon your furrowed brow, and inscribed in plaintive and forlorn notes upon your every intonation! Ye have married, but not congenially! The cooing dove has lost its wonted mate! Happy if only lost! Strayed to another perhaps! Alienated! Your souls transfixed with many sorrows! Your life so changed from expectation's happy dreams! And all this but the mere beginning of sorrow! No wonder that your beauty fades, that you drag out a miserable existence while you live, and die before your time.

CHAPTER V.

IMPORTANT TRUTHS FOR THE NEWLY MARRIED.

Self-Improvement—Promoting Happiness—Conjugal Attentions—Cultivating Love—Remedy for Discords—Consecration, Each to the Other—Love's Little Indulgences—Wives and Money—Expressing Affection—Love no longer Mentioned—Billing and Cooin—Manly Husbands—Devoted Wives—Animal Passion—First Great Business—Cold Indifference—Reasons of Infidelity—Highest Human Duty—Contentment Better than Dollars—Paralysis of the Affections—Starved Hearts.

BOTH improve yourselves. Love must progress ; which requires either the culture or discernment of new lovable qualities. For your own and each other's sakes each should improve daily. On her husband's return from business every wife should show some new work begun, or old one advanced ; a new piece of music commenced, or prior one perfected ; some new head work, hand work or heart work, with which to redelight him ; while he must be able to "report progress" in whatever he engages, and especially in himself. How delightful to both to see this improvement in the other ; how painful their decline ?

Personal effort is its great instrumentality. Passivity forestalls progress. Only active participancy can avail. Though a husband's praise may inspire a wife to effort, yet only she can put her own hands to the plough ; and so of him. Each can tone up the other's will, but "the gods help only those who help themselves." We expect improvement in all we possess, much more in a partner. The decline of either after marriage grossly wrongs the other. Begin here now and redouble the other's love by rendering yourselves daily the more lovable and worthy.

Love seeks the happiness of its object as uniformly as water its level and light diffusion. Kindness accompanies love as surely as gravity matter, and always augments it. While it is due from all to all, even beasts, and doubly between the sexes, yet love augments it

as sun warmth. Let all who ever love attest whether desire to make the loved one happy was not your paramount instinct.

Since genuine gallants are naturally attentive to ladies, never waiting to be asked to do this and not that, but anticipating and supplying their wants, and lovers more so, how much more a loving husband those of his idolized wife? He will early learn just what she likes and dislikes, and provide the one, avoid the other. Indeed, kindness is nature's great means of expressing and awakening love.

Example of Marital Kindness.

A septuagenarian Quaker, visiting, when taking leave, requested Deborah to be at the door in about five minutes. Arrived, he turned the carriage-wheels so as to facilitate her ingress, half clasped her in his arms, half lifted her in, and going all around tucked in buffalo-robe and blanket tightly around her feet with the utmost tenderness as if she were his choicest jewel.

Will not the loving husband treat his precious wife as his darling pet, his idol, his other self, the mother of his angel children, the partner of all his joys and sorrows, and as though nothing he could do for her were good enough, and by perpetual attentions at table, in parlor, nursery, boudoir, and especially in company, both manifest his love for her and re-ignite hers for him?

Such treatment is your duty. Your conjugal relations absolutely require and demand it! As the inherent dependence of a helpless child on parents obligates them to provide for its creature comforts, so a like dependence of a wife on her husband imposes on him a like moral duty. He who does not fulfil it perpetrates a sin of omission against her.

A married pair may be kind without loving. He may support her in style, furnish her plenty of money, even gratify her very whims, and she do everything kindly, without loving; but they can no more love without being kind than live without breath; and their mutual tenderness waxes and wanes with their affections. The more they love the more their kindness overflows in all their minutest actions

and feelings towards each other. Love's eyes, lips, hands and heart are brimful of desire to make each other just as happy as possible, always saying, "Please let me do this and that for you." Neither can make self a tithe as happy as each can the other.

Mutual Happiness.

A loving wife can render her husband, and he her, ten times happier than either can possibly render themselves. How infinitely and perfectly adapted are all the details of the conjugal state to this promotion of the other's enjoyment, and thereby their own! As "it is more blessed to give than receive," even from strangers, how infinitely more so to and from one beloved! No human luxury at all equals this.

Happiness is the natural aliment of love. That of each is in the exact ratio of the happiness conferred by the other. Hence, exactly in proportion as a wife renders her husband happy, does she thereby compel him to love her. He cannot help himself, and will not desire to, but is "led a willing captive." Exactly in proportion as he renders her happy, does he thereby oblige her to love him and seek his pleasure. Every thrill either occasions the other, redoubles the other's love; and every twinge of pain either gives the other, engenders dislike.

These results are as absolute and certain as those of gravity, because equally governed by a first natural law. Thus, if your wife makes you happy three, or five, in the scale of seven, she thereby compels you to love her three, or five; whereas, if she makes you miserable three, or five, she thus compels you to hate her three, or five. Or if she makes you happy five, but miserable three, you love her five, but hate her three; whereas, if she renders you happy three, but miserable five, she obliges you to hate her five, but love her only three.

So she who makes husband perfectly miserable, without any happiness, engenders perfect hatred; whereas, she who makes him perfectly happy, without any alloy or misery, thereby renders his love absolutely

perfect. Nature's mathematical equations are no more absolutely infallible than are these her love equations. No will-power of either can prevent these results, any more than smarting at the touch of fire. Please, husbands and wives, learn from the principle here involved both the one generic cause and remedy of most conjugal discords and means of redoubling each other's love to any desired extent.

Some pairs can live neither together nor apart, because certain characteristics of each render the other so happy as involuntarily to draw them together, and others so miserable that they cannot stay together, and hence quarrel and separate to-day, only to come together and make up to-morrow, which they perpetually repeat. The only true way for each to secure merely their own happiness is to devote themselves to that of their companion. This is wedlock, and rewards itself.

The Service of the Heart.

Which should serve? The one who loves the most will take the greatest delight in doing the most to promote the other's happiness. Among savages, woman is man's slave; but as humanity rises, the man treats the woman with more and still more tenderness.

Mating should consist in the self-consecration of each to the happiness of the other. Let each live not at all for self, but for the other. All that each can do to promote the creature comforts of the other, by indulging each other in dress, taste, appetite, fancies, even whims, anything, everything which gives the other pleasure, reacts for the giver. Yet many husbands deny, instead of indulging, their wives. Is not indulgence affection's greatest privilege? Does a doting grandfather ever deny his darling grandson, even in trifles? What if he sees that the boy is "pleased with a rattle and tickled with a straw," he gives rattle and straw, not with, "You fool, to want such trifles!" but as if delighted to see him enjoy them.

Indulging a wife in some trifle often makes her inexpressibly happy, fond, and kind in return; whereas, denying her some little thing, sours and spoils her throughout. Husbands, by all means, humor even their whims.

Herein consists your own greatest life-luxury. That millionaire husband who takes all the pleasure he can in recounting his millions, adding thereto, and sating all his other desires, is a poor, unfortunate, happiness-wrecked mortal, if he either has no wife on whom to lavish these little, hourly, momentary courtesies, or else is too much alienated to proffer them, except with a grudge, and may envy that laboring man who finds his own highest happiness in toiling for that woman who is nursing and rearing their darlings.

The Richest Luxury.

It requires a loving wife, in addition to dollars, to render a man happy. Of all the luxuries permitted to mortal man, those of a well-sexed and loving as well as beloved husband which are derived from promoting the happiness of his dear wife, are richest. Talk about luxury without this, and you talk nonsense. Have all other luxuries but this, you have only trash. Have this, it hardly matters how few besides, and you have "all things added thereunto." Yet you must do not for another man's wife, or everybody's, but for your own.

The expression of every faculty enkindles the same one in those around. Anger in man and beast always provokes anger. Revivals of religion proceed on this principle, and are caused by worship in one or more, eliciting a like devout feeling in others. Laughter awakens laughter; thought, thought; taste, taste; music, music; and thus of every other human function. Nothing can equally intensify the action of each and all the faculties.

This principle applies to love, and can be employed to elicit it to almost any desired extent.

Courtship and Its Influence.

All courtships provoke love by its expression. No known means of promoting affection equals that of declaration. One cannot feel love without showing it by words and deeds, which reincrease by redelighting. How simple a means of its promotion! while omitting to express it leaves its fires unsupplied by fuel. How intensely pleas-

urable is its first full declaration! And yet most, after having declared their affection, stow it away among the sacred archives of the past, rarely to be repeated. Each feels love, yet doubts that of the other, virtually arguing, "If she really loved me, she would show it." "He kissed me when he loved me, but has stopped kissing, because he has stopped loving."

Many hard feelings, or open "spats," have occurred, and have been mutually overlooked since its first declaration; yet as neither has expressed much since, both infer that the other's has ceased, which chills that of each, till both settle back into apparent indifference. They took lovers' walks once, take none now. They were talkative then, are now demure. They part and meet many times per day, go out, come in, retire, and rise, without one loving word; and though kind enough, friendly enough, and all that, yet both seem as perfectly indifferent to each other as if unsexed. What each desires is done freely enough, but without any expressions of tenderness.

How Young Lovers Act.

They can and do talk freely enough on all other subjects, but never one word about their love. They eat, work, and go to church together; but if either should impress a genuine, hearty love-kiss upon the other's cheek, the kissed one would be as perfectly amazed as if a clap of thunder had startled them on a cloudless day. And yet both, at the core of their hearts, really do love each other, though, like buried fire, no "sparks" or heat come to the surface. And thus their love smoulders on, and often out. How many such! Why? Because both neglect to supply the other's love with its indispensable fuel, have burned out their first, buried its fires under its own ashes, and just live along, neither hot nor cold, dead nor alive.

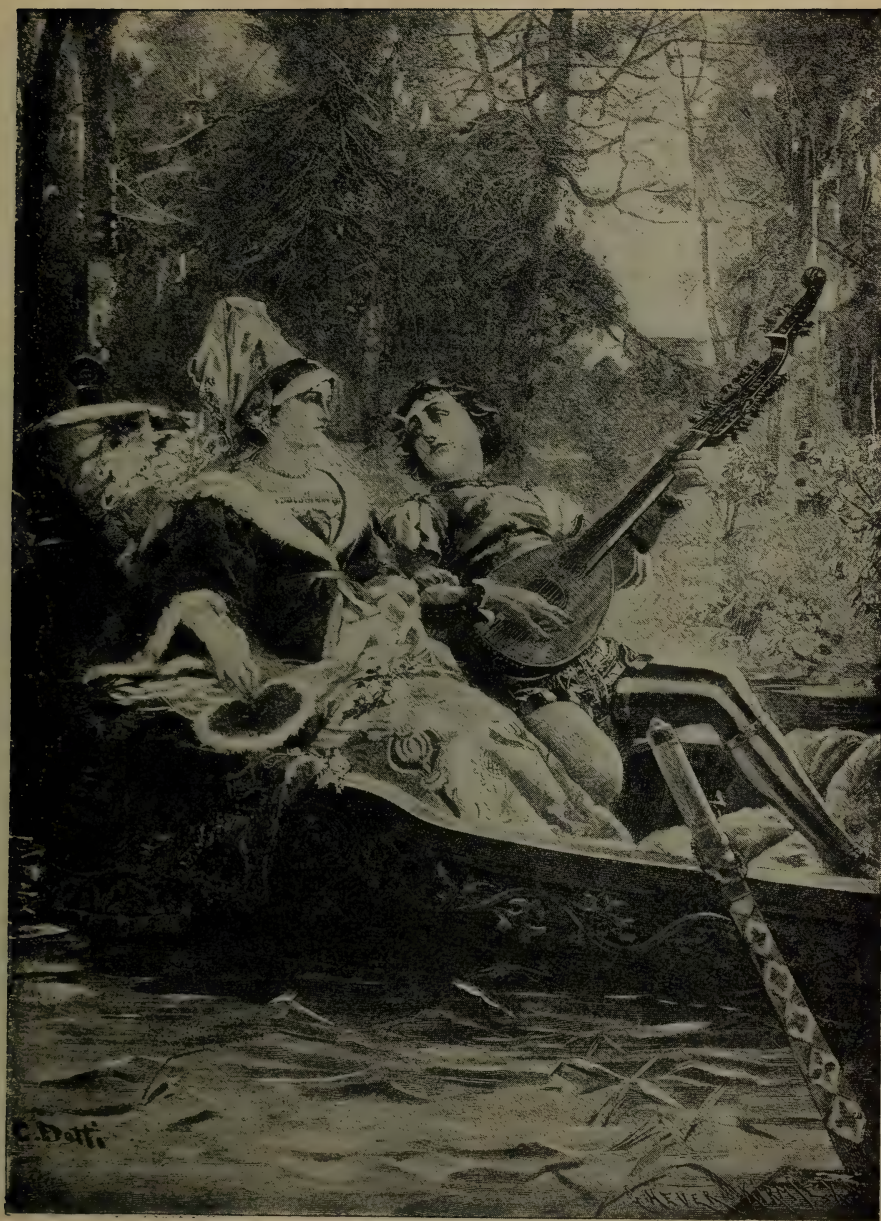
"Must the married be always billing and cooing?" you say. "This may be tolerated in young lovers, and during the honeymoon, but is perfectly sickening, if not indelicate, even immodest, between the married, except in private. Besides, those who appear so loving before folks always quarrel behind the curtain."



A PROMENADE AT THE OPERA



A SONG OF THE HEART.



THE LOVER'S AFLOAT



"DREAMING THE HAPPY HOURS AWAY."

Woman is love's umpire. Hence, if she wants to be made love to, the man who has a right to should make it. If she wishes to caress and be caressed, he should help, not hinder her. She is the more loving; then should not man pattern after her and follow suit? A normally-sexed woman loves to be loved and caressed by him who has her heart, and "that before folks," except that custom frowns thereon. Women, tell the world in general, and your own husbands in special, just how you desire them to comport themselves towards you.

The married should love each other just as young lovers do, only



THE NATURAL EXPRESSION OF LOVE.

as much more as they are older. Then, whatever it is proper to feel it is equally proper to manifest "before folks."

It is manly for a man to love his wife. He was created a man expressly for this. Then is it not as manly to express this love, and equally feminine in her both to tenderly love her husband and manifest her outgushing tenderness? Is love loathsome, that it must be stifled? It is the purest of emotions. Only when it is perverted is it indelicate. And if husbands and wives would but manifest more love in purity, they would experience far less of its animal aspect. These young lovers are true to the mating instinct; but discontinuing these

attentions proclaims the paralysis of love ; for they can no more help this its natural language and manner, in proportion as they love, than help laughing when merry or shivering when cold. But the real trouble lies here.

Loving Courtesies in Private and Public.

Love becomes carnalized soon after marriage and, therefore, from mere shame of its own deformity, shuns public gaze. The purer and stronger it is, the more gushingly and frankly does it express itself, "in season and out of season, at home and abroad, alone and before beholders," because inherently conscious of its innocence and appropriateness. And if husbands and wives would manifest much more of these loving courtesies before others, they would both inexpressibly enhance its Platonic form and diminish its animal manifestations. Woman, what say you to this change?

Husbands and wives, make recherishing each other's affections your very first life-business, and let your past remissness only render you the more assiduous hereafter. You certainly ought to know by this time how to awaken each other's deadened affections. Think over just how you would proceed if, to-day unmarried, you had found a conjugal mate exactly to your liking, and were trying in your best style to gain his or her heart and hand, and practice accordingly in respect to each other.

Begin by talking over with each other the desirableness of this change and best mode of effecting it. Put it on an intellectual base. Read over this chapter together, and both vie with each other in getting up a new love affair between yourselves, each making yourselves as lovely to the other as possible. Take lovers' walks, talks, and rides ; be happy together, and treat each other just as you used to in your young love, and as you now see young lovers.

Indifferent or repellent conjugal manners are odious. Lion and lioness, tiger and tigress, are never indifferent, much less spiteful, towards each other. Notwithstanding all their native ferocity, all is kindness and gentleness towards each other. Not one hostile or even

indifferent animal pair is found, except among human brutes—who, when antagonistic, are as much more brutal than savage beasts, as man should be a higher sample of conjugality than animal. Every woman whose husband is indifferent, is entitled by nature's laws to a divorce, is divorced practically; for this indifference "puts her away," while her indifference towards him is virtual abandonment.

Blighting Effects of Neglect.

What ergot is to grain and poison to food, conjugal neglect or coldness is to true conjugality; but what rich, luscious fruit is to eye and taste, are these turtle-dove billings and cooings to love—its very nature, embodiment, and great promoter. To reciprocate it, woman was made feminine and charming.

Indifference causes alienations and infidelities. After love has been once awakened, it must continue or starve. It should be directed to its first object, but becoming estranged from it, must seek another or perish. This law explains Mrs. Gurney's sad fall. Her parliamentary husband, though kind to her and regaling her with country and city pleasures *ad libitum*, was too busy to lavish on her those little attentions so agreeable to woman and promotive of love, which, bestowed by her groom, completely fascinated her and induced her to abandon husband, family position, everything dear to her, that she might revel in those little gallantries which, if they had been supplied from their legitimate source, would doubtless have had no charms for her from a lower quarter.

Strongest of Human Ties.

Conjugal duties are more obligatory than pecuniary, benevolent, neighborly, or filial. As those who solemnly promise to pay promptly for goods delivered are bound faithfully to fulfil, so when a woman has delivered her whole being to a man, under his solemn promises, implied and expressed in secret and public, that he will repay her in and by bestowing his own on her, does not every human obligation demand his fulfilment of his vow to "love and cherish her till parted by death?"

What human duties are as strong or lasting? Does a monetary protest disgrace you a tithe as much as a woman's love-protest.

True, your creditor requires his pay much; but your wife needs her heart-pay most. He would be injured, perhaps made a bankrupt, by your non-payment; but will not your non-payment to her render her a love-bankrupt for life? He might recover, she never can. Your love renders her a thousand-fold happier, and is more necessary to her whole future life, than your dollars to him. It is her all. When it perishes, all perishes. Or, if she survives, her life is only automatic. What infinite damage your non-payment of this heart-debt does her!

Besides, law, "society," and the very nature of love, prevent her getting its adequate supply except from you. It is as much a part of her soul-being as her heart is of her body, and this want is as imperious.

Returning Good for Evil.

Man is oftenest absorbed in business, woman in dress and display, or, perhaps, gives as much of her time and soul to children as he of his to business, and as little of hers to him as he of his to her; yet two wrongs never make a right, but together, aggravate each other. The more remiss either is, the more assiduous the other should be. To return neglect for neglect is to return "evil for evil." The golden rule, "return good for evil," or love for indifference, is better. Nearly all can thereby be melted down in this affectional crucible. At least, woman should do her best to retain those loving ways and manners by which she first drew forth a husband's love, and those who are loved least should try hardest.

The paralytic state of the affections in one or both often leaves them oblivious to many conjugal excellences which ought to awaken both gratitude and love, just as a paralyzed stomach fails to appreciate dainties. Is it not the duty of each to appreciate and love what is lovable in the other? And the one who fails soon ceases to manifest lovely qualities. Probably no human faculty is as dormant, suffers as much from paralysis, is as imperfectly developed, or as often and effectually retroverted, as love.

PART II.

THE HUMAN PELVIS AND ORGANS OF GENERATION

CHAPTER VI.

STRUCTURE OF THE PELVIS.

Meaning of the Term Pelvis—Natural Form and Dimensions—The Brim—The Cavity—Position in Regard to the Trunk of the Body—How the Womb is Supported—Separation of Bones During Childbirth—Loosening of Ligaments—Male and Female Pelvis Compared—Bones of the Male Harder Than in the Female—Deformities of the Pelvis—How Distortions are Produced.

THE term pelvis is applied to that mass of bones which, placed at the bottom of the spinal column, and resting on the inferior extremities, connect the thighs with the upper part of the trunk. When divested of its soft structures this organ somewhat resembles a basin, and hence its name; for the Greeks called it by a name signifying a wooden utensil of bowl-form, used for domestic purposes; the Latins from them derived the word pelvis, which we have adopted. In many of the older anatomical works it is described as "the basin," but all the recent authors have preferred the more classical appellation of pelvis.

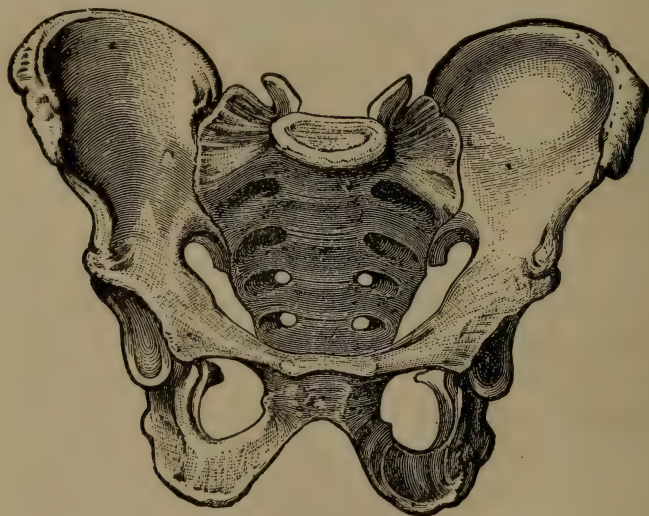
Form and Dimensions of the Pelvis.

When we examine the pelvis with reference to childbirth we must attend not only to its figure but also to its dimensions, and the bearings which its axes hold in regard to each other and to the trunk of the body. We observe that it is formed on the principle of the double arch, which structure in architecture possesses the greatest possible degree of firmness that can be devised for the quantity of material

employed. So that the pelvis combines, to an eminent extent, the qualities of strength and lightness.

In demonstrating the shape and size of the female pelvis, it is the custom not to describe any particular specimen which we may happen to possess, but to assume a model of perfection, which we consider standard ; so symmetrically formed, as would most completely answer all the intentions that nature has assigned to it.

The brim, somewhat oval in shape, has necessarily two diameters—the longest from side to side—the shortest in the centre from before

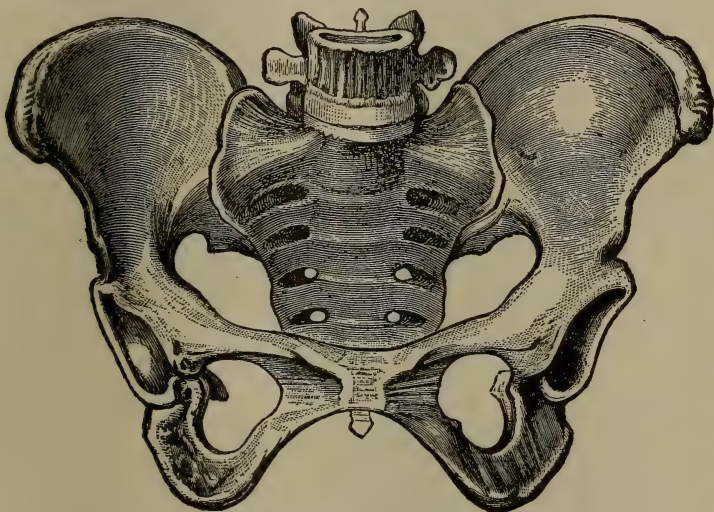


THE MALE PELVIS.

backwards. The regularity of the oval is broken so that the outline represents, in some measure, the heart as painted upon playing cards. But this resemblance is stronger in the male than in the pelvis of the opposite sex, because the longest diameter in the male pelvis is from top to bottom, while in the female it is laterally, or from side to side.

The cavity is observed to be deep behind, shallow in front ; and it becomes gradually shallower as we traverse from the back to the fore part. The greatest depth should be from five inches and a half to six inches, and at the side three inches and a half.

The position of the pelvis in regard to the trunk of the body is neither perpendicular to the horizon, nor horizontal, but oblique. It is thus that the uterus or womb is supported during the latter months of pregnancy. Were the axes of the trunk and pelvic entrance in the same line, owing to the upright position of the human female, the womb, towards the close of gestation, would gravitate low into the pelvis, and produce most injurious pressure on the contained viscera; while, in the early months, not only would the same distressful inconvenience be occasioned, but there would be great danger of its pro-



THE FEMALE PELVIS.

truding externally, and appearing as a tumor between the thighs, covered by the inverted vagina (passage to the womb).

It was for many centuries the prevalent opinion that the bones of the pelvis always separated—or were disposed to separate, if occasion required it—during parturition (childbirth), and that they thus allowed the pelvic dimensions to be increased in every direction. This idea was rendered more probable by analogy; for it is said that in some animals, as the cow, the bones are absolutely disunited to some extent, and that the sinking of the sacrum, occasioned by its own

weight and by the softened condition of the ligaments, together with a difficulty in progressive motion, is an indication of the near approach of parturition. Such a separation may possibly take place in the lower animals, but it is certainly not usual in the human subject.

Derangement of the Bones and Ligaments.

The joints are liable, indeed, to inflammation; and pus being secreted between the bones may occasion disunion—a disease attended with high constitutional excitement, and no small danger. Sometimes, also, an actual separation of the bones occurs, both during pregnancy and after labor, from simple relaxation of the ligaments; which state gives rise to pain in the part deranged, and an inability to walk or stand without artificial support. This affection, though not attended with so much suffering or hazard as acute inflammation, is nevertheless of a very distressing character, and very difficult of cure, commonly confining the patient to bed or the sofa for many months.

But it would be travelling too far out of the limits of this publication to enter minutely into the history of these diseases; and it is sufficient for our present purpose to know that, in the great majority of cases, there is no sensible relaxation of the pubic or sacro-iliac ligaments; that in others a softening does occur in various degrees, and that, when that change reaches such a point as to be attended with pain or inconvenience, it must be considered as morbid.

Differences Between the Male and Female Pelvis.

On comparing the male and female pelvis together, we cannot but remark a striking difference in the general appearance and particular proportions of this organ in the two sexes. We observe that the pelvis of the female is altogether larger and more delicately shaped than that of the male. The brim is differently shaped; the long diameter in the female being from side to side; in the male from before backwards.

The cavity is considerably smaller in the male, deeper, more of a funnel shape. The outlet is also far less capacious. The arch of the



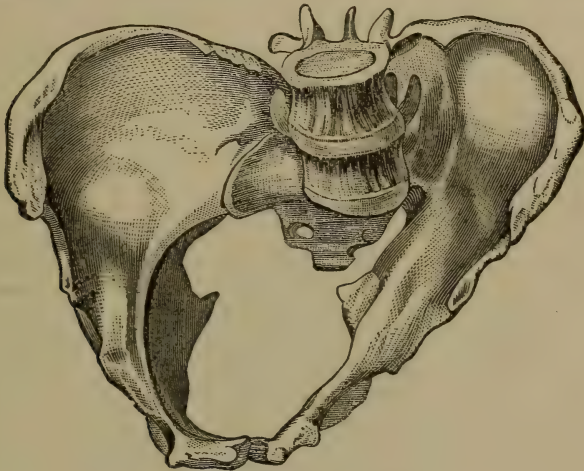
THE UTERUS (WOMB) WITH VAGINA LAID OPEN.

a, b. Section of peritoneum. *d.* Os uteri (mouth of the womb).
e, e, e. Fold of peritoneum. *f, f.* Round ligament of womb. *g, g.* Fal-
 lopian tubes. *h.* Fringed extremity of Fallopian tube. *i, i.* Ovaries.
k. Vagina.

pubes is formed more angularly than in the female, in whom this part approaches nearer to the perfection of an arch. All the bones of the male skeletons are firmer and heavier than they are in the female, and more powerfully marked by those irregularities which indicate muscular attachments.

Deformity of the Pelvis.

Fortunate would it be for child-bearing women if they each possessed a pelvis of the standard figure and dimensions. Such, however, is by no means the case; and this organ is subject to great varieties,



A DEFORMED PELVIS.

as well in form as size. It would, indeed, be difficult to select from all the preserved specimens in existence, any two which exactly resemble each other—agreeing minutely in shape, dimensions and weight. Many are found to be much above the ordinary volume and numbers, on the other hand, greatly below it.

The want of due capacity sometimes originates in natural formation; thus, a woman of short stature, although of tolerable symmetry, might be expected to possess a diminutive pelvis; but this is far from being universal, or even a general remark. Again, the re-union of the bones after fractures will commonly occasion both distortion and con-

traction of space ; but when there exists a deficiency of room to any great extent, the irregularity is mostly dependent on disease of the bones themselves.

If we look at the head of the child, and the cavity through which it has to traverse, in a mechanical point of view (which we must do before we can arrive at a correct knowledge of the process of parturition, even in the simplest and most easy state), we shall immediately perceive that size, as regards the head and the pelvis, is entirely a relative term, and that a pelvis preternaturally small, or a head unusually large, will each in practice occasion difficulty in the same degree as they deviate from the standard dimensions ; so that it matters little whether the disproportion be the consequence of diseased action or any other cause ; provided it exists, to a certain extent, it must necessarily be productive of a protracted struggle.

There are two diseases particularly, through which the pelvis suffers considerable deterioration in size—*rachitis*, or rickets, a disorder of childhood, and *mollities ossium* or *malacosteon* (softening of the bones), one of adult age. In both these affections there is a want of due solidity in the osseous system throughout the whole body. The animal matter entering into the composition of the skeleton being in great excess, and the earthy matter in proportionate deficiency, the bones yield like softened wax ; the regularity and beauty of the pelvic form, as well as of other bony cavities, is destroyed, and miserable specimens of distortion are the result.

CHAPTER VII.

GENITAL ORGANS OF THE FEMALE.

The Mons Veneris—The Labia, or Lips—The Vulva—The Clitoris—The Nymphae—Vagina, or Canal Extending to the Uterus—The Sphincter—The Hymen and its Situation—Uterus, or Womb—Fallopian Tubes—Mouth of the Uterus—Internal Cavity—Mucous Membrane—Arteries, Veins and Nerves—The Ligaments—Structure of the Ovaries—Ovasacs, or Graafian Vesicles—Vesicles in the Foetus—Nerves of the Ovaries.

THE genital organs of the male effect fewer functions than those of the female. They serve for copulation and fecundation only.

Those of the female—in addition to parts which fulfil these offices—comprise others for gestation and lactation (suckling).

The soft and prominent covering to the symphysis pubis—which is formed by the common integument, elevated by fat, and, at the age of puberty, covered by hair, formerly termed *tressoria*—is called *mons veneris*. The absence of this hair has, by the vulgar, been esteemed a matter of reproach; and it was formerly the custom, when a female had been detected a third time in incontinent practices, in the vicinity of the Superior Courts of Westminster, to punish the offence by cutting off the *tressoria* in open court.

Below this are the *labia pudendi* or *labia majora*, which are two large, soft lips, formed by a duplicature of the common integument, with adipose matter interposed. The inner surface is smooth and studded with sebaceous follicles. The labia commence at the symphysis pubis, descend to the *perinæum*, which is the portion of the integument, about an inch and a half in length, between the posterior commissure of the labia and the anus.

The opening between the labia is the *vulva* or *fossa magna*. At the upper junction of the labia and within them, a small organ exists, called *clitoris*. It is formed of corpora cavernosa, and is terminated anteriorly by the *glans*, which is covered by a prepuce consisting of a prolongation of the mucous membrane of the vagina.

Extending from the prepuce of the clitoris, and within the labia majora, are the *labia minora* or *nymphæ*, the organization of which is similar to that of the labia majora. They enlarge as they pass downwards, and disappear when they reach the orifice of the vagina.

In warm climates, the nymphæ are greatly and inconveniently elongated, and amongst the Egyptians and other African tribes, it has been the custom to extirpate them, or diminish their size. This is what is meant by *circumcision* in the female.

The Vagina.

The *vagina* is a canal, which extends between the vulva and uterus, the neck of which it embraces. It is from four to six inches long, and an inch and a half, or two inches, in diameter. It is situate in the pelvis, between the bladder before, and the rectum behind; is slightly curved, with the concavity forwards, and narrower at the middle than at the extremities. Its inner surface has numerous—chiefly transverse—*rugæ*, which become less in the progress of age, after repeated acts of copulation, and especially after childbirth. It is composed of an internal mucous membrane, supplied with numerous follicles, of a dense areolar membrane, and, between these, a layer of erectile tissue, which is thicker near the vulva, but is by some, said to extend even as far as the uterus. The upper portion of the vagina, to a small extent, is covered by peritoneum.

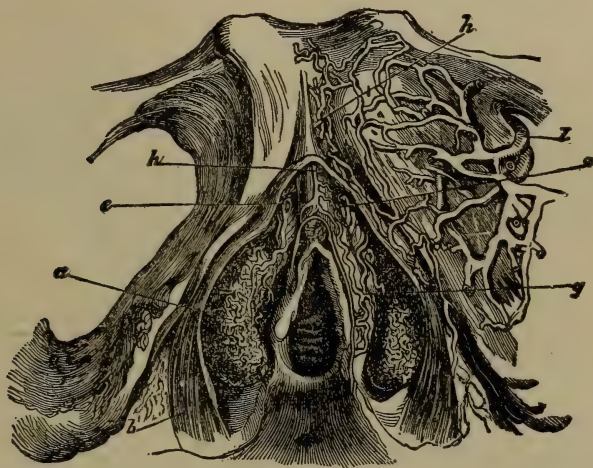
The *sphincter* or *constrictor vaginæ muscle* surrounds the orifice of the vagina. It is about an inch and a quarter wide, and ordinarily about six inches in length; arises from the body of the clitoris, and passes backwards and downwards, to be inserted into the dense white substance in the centre of the perineum.

The Hymen.

Near the external aperture of the vagina is the *hymen*, which is a more or less extensive membrane of variable shape, formed by the mucous membrane of the vulva, where it enters the vagina, so that it closes the canal more or less completely.

It is generally very thin, and easily lacerated, but is sometimes extremely firm, so as to prevent penetration. It is usually of a semilunar shape; sometimes oval from right to left, or almost circular, with an aperture in the middle; whilst, occasionally, it is entirely imperforate, and, of course, prevents the issue of the menstrual flux.

It is easily destroyed by mechanical violence of any kind, as by strongly rubbing the sexual organs of infants with coarse cloths, and by ulcerations of the part; hence its absence is not an absolute proof



FRONT VIEW OF THE ERECTILE STRUCTURES OF THE EXTERNAL
ORGANS OF GENERATION IN THE FEMALE.

a. Bulbus vestibuli. *b.* Sphincter vaginae muscle. *c, c.* Venous plexus, or pars intermedia. *g.* Connecting veins. *h.* Dorsal vein of the clitoris. *l.* The obturator vein.

of the loss of virginity, as it was of old regarded by the Hebrews, nor is its presence a positive evidence of continence. Individuals have conceived in whom the aperture of the hymen has been so small as to prevent penetration. Its general semilunar or crescentic shape has been considered to explain the origin of the symbol of the *crescent* assigned to Diana, the goddess of chastity. Around the part of the vagina where the hymen was situate, small, reddish, flattened, or rounded tubercles—*carunculae myrtiformes* seu *hymenales*—afterwards

exist, which are of various sizes, and are formed, according to the general opinion, by the remains of the hymen. MM. B  clard and J. Cloquet consider them to be folds of mucous membrane. Their number varies from two to five, or six.

The Uterus (Womb).

The *uterus* is a hollow organ for the reception of the foetus, and its retention during gestation. It is situate in the pelvis, between the



ANTERIOR VIEW OF THE UTERUS AND APPENDAGES.

a. Fundus, *b*, body, and *c*, cervix or neck of the uterus. *e*. Front of the upper part of the vagina. *n, n*. Round ligaments of the uterus. *r, r*. Broad ligaments. *s, s*. Fallopian tubes. *l*. Fimbriated extremity. *u*. Ostium abdominale. The position of the ovaries is shown through the broad ligaments, and also the cut edge of the peritoneum, along the lower border of the broad ligaments and across the uterus.

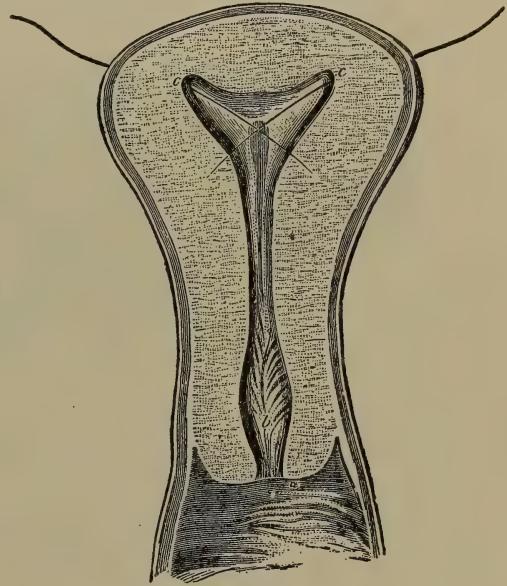
bladder—which is before, and the rectum behind, and below the convolutions of the small intestines. It is of a conoidal shape, flattened on the anterior and posterior surfaces; rounded at the base, which is above, and truncated at its apex, which is beneath. It is of small size, its length being only about two and a half inches; breadth, one and a half inch at the base, and nearly an inch at the neck; thickness, about an inch. It is divided into the *fundus*, *body*, and *cervix* or *neck*.

The fundus is the upper part of the organ above the insertion of the Fallopian tubes. The body is the part between the insertion of the

tubes and the neck, and the neck is the lowest and narrowest portion, which projects and opens into the vagina. At each of the two superior angles are the opening of the Fallopian tube, the attachment of the ligament of the ovary, and that of the round ligament.

The inferior angle is formed by the neck, which projects into the vagina to the distance of four or five lines, and terminates by a cleft, situate crosswise, called *os tinæ*, *os uteri* or *vaginal orifice of the uterus*. The aperture is bounded by two lips, which are smooth and rounded in those that have not had children; jagged and rugous in those who are mothers—the anterior lip being somewhat thicker than the posterior. It is from three to five lines long, and is generally more or less open, especially in those who have had children.

The internal cavity of the uterus is very small in proportion to the bulk of the organ, owing to the thickness of the parietes, which almost touch internally. It



WOMB LAID OPEN.

a. The os uteri. b. The cervix. c. c. Extremities of the Fallopian tubes.

is divided into the cavity of the body, and that of the neck. The former is triangular. The tubes open at its upper angles. The second cavity is more long than broad; is broader at the middle than at either end; and at the upper part where it communicates with the cavity of the body of the uterus an opening exists, called *internal orifice* of the uterus, the *external orifice* being the os uteri. The inner surface has several transverse rugæ, which are not very

prominent. It is covered with a fine villi, and the orifices of several mucous follicles are visible.

Mucous Membrane of the Uterus.

When examined with a lens, the mucous membrane is found to be marked over with minute dots, which are the orifices of numerous simple tubular glands; some of these are branched and others slightly twisted into a coil. They can be seen in the virgin uterus, but become



POSTERIOR VIEW OF THE UTERUS AND ITS APPENDAGES, THE CAVITY OF THE UTERUS BEING SHOWN BY THE REMOVAL OF ITS POSTERIOR WALL, AND THE VAGINA BEING LAID OPEN.

a. Fundus, *b.* body, and *c.* cervix of the uterus, laid open. The arbor vitæ is shown in the cervix. *d.* The os uteri externum, laid open. *e.* The interior of the upper part of the vagina. *f.* Section of the walls of the uterus. *i.* Opening into Fallopian tube. *o.* Ovary. *p.* Ligament of ovary. *r.* Broad ligament. *s.* Fallopian tube. *t.* Fimbriated extremity.

enlarged on impregnation. The proper tissue of the organ is dense, compact, not easily cut, and somewhat resembles cartilage in color, resistance and elasticity. It is a whitish, homogeneous substance, penetrated by numerous minute vessels.

In the unimpregnated state, the fibres which enter into the composition of the tissue, appear ligamentous, and pass in every direction, but so as to permit the uterus to be more readily lacerated from the circumference to the centre than in any other direction. The precise



SECTION OF FEMALE PELVIS, SHOWING THE PRINCIPAL PELVIC NERVES.

a. Spermatic vein. *b.* Spermatic artery. *c.* Directs to the vena cava
d. The aorta. *e, e.* Inferior mesenteric nerves. *f, g.* The fourth and
 fifth lumbar ganglia. *h, i, k.* The first, second, and third sacral
m, m, m. The lumbar and sacral nerves. *n.* Branch supplying lower
 part of the rectum.

character of the tissue has been a matter of contention amongst anatomists. The microscope shows it to be composed of muscular fibres of the unstripped variety, interlacing with each other, but disposed in bands and layers, intermixed with much fibro-areolar tissue, a large number of bloodvessels and lymphatics, and a few nerves. The arrangement of the muscular fibres is best studied at an advanced period of utero-gestation.

Arteries, Veins, Etc., of the Uterus.

Besides the usual organic constituents, the uterus has arteries, veins, lymphatics and nerves. The arteries proceed from two sources—the spermatic, which are chiefly distributed to the fundus of the organ, and towards the part where the Fallopian tubes terminate; and the hypogastric, which are sent especially to the body and neck. Their principal branches are readily seen under the peritoneum, which covers the organ; they are very tortuous; frequently anastomose, and their ramifications are lost in the tissue of the viscus, and on its inner surface.

The veins empty themselves partly into the spermatic, and partly into the hypogastric. They are even more tortuous than the arteries; and, during pregnancy, dilate and form what have been termed *uterine sinuses*. The nerves are derived partly from the great sympathetic, and partly from the sacral pairs. Some anatomists have maintained that the womb is copiously supplied with nerves; others, that the number is not by any means great.



SECTION OF WOMB.

a. Top of uterine cavity. *b, c.* Longitudinal section. *d.* Os uteri (mouth). *e.* upper part of vagina.

Appendages of the Uterus.

1. The *ligamenta lata* or *broad ligaments*, which are formed by the peritoneum. This membrane is reflected over the anterior and posterior surfaces and over the fundus of the uterus, and the lateral dupli-

catures of it form a broad expansion and envelop the Fallopian tubes and ovaria. These expansions are the broad ligaments.

2. The *anterior* and *posterior ligaments*, which are four in number and are formed by the peritoneum. Two of these pass from the uterus to the bladder—the *anterior*—and two between the rectum and uterus—the *posterior*.

3. The *ligamenta rotunda* or *round ligaments*, which are about the size of a goose-quill, arise from the superior angles of the fundus uteri, and, proceeding obliquely downwards and outwards, pass out through the abdominal rings to be lost in the areolar tissue of the groins. They are whitish, somewhat dense cords, formed by a collection of tortuous veins and lymphatics, nerves and longitudinal fibres, which were, at one time, believed to be muscular, but are now generally considered to consist of condensed areolar tissue.



FALLOPIAN TUBE.

4. The *Fallopian* or *uterine tubes*; two conical, tortuous canals, four or five inches in length, situate in the same broad ligaments that contain the ovaries,

and extending from the superior angles of the uterus as far as the lateral parts of the brim of the pelvis. The uterine extremity of the tube is extremely small, and opens into the uterus by an aperture so minute as scarcely to admit a hog's bristle. The other extremity is called *pavilion*. It is trumpet-shaped, fringed, and commonly inclined towards the ovary, to which it is attached by one of its longest fimbriæ.

The Fallopian tubes, consequently, open at one end into the cavity of the uterus, and at the other, through the peritoneum into the cavity of the abdomen. They are covered externally by the broad ligament or peritoneum; are lined internally by a mucous membrane, which is soft, villous, and has many longitudinal folds; and between these coats is a thick, dense, whitish membrane, which is possessed of contractility although muscular fibres cannot be detected in it.

The *ovaries* are two ovoid bodies, of a pale red color, rugous, and nearly of the size of the testes of the male. They are situated in the cavity of the pelvis, and are contained in the posterior fold of the broad ligaments of the uterus. At one time they were conceived to be glandular, and were called the female testes; but as soon as the notion prevailed that they contained ova, the term *ovary* or *egg vessel* was given to them. The external extremity of the ovary has attached to it one of the principal fimbriæ of the Fallopian tube.

The inner extremity has a small fibro-vascular cord inserted into it; this passes to the uterus, to which it is attached behind the insertion of the Fallopian tube, and a little lower. It is called *ligament of the ovary*, and is in the posterior ala of the broad ligament. It is solid, and has no canal. The surface of the ovary has many round prominences, and the peritoneum envelops the whole of it, except at the part where the ovary adheres to the broad ligament. The precise nature of its parenchyma or *stroma* is not determined. When torn or divided longitudinally, it appears to be constituted of a cellulo-vascular tissue.



SECTION OF OVARY.

Ovisacs or Graafian Vesicles.

On cutting into a healthy ovary of a subject not too far advanced in life, a number of small vesicles or bladders (so small as to require the aid of the microscope to see them) may be readily separated. These vesicles are named after De Graaf, their discoverer.

In the lower animals, the ovary consists of a loose tissue, containing many cells, in which the ova are formed, and from which they escape by the rupture of the cell-walls; in the higher animals, as in the human female, the tissue is more compact, and the ova, except when they are approaching maturity, can only be distinguished by the aid of a high magnifying power.

Observations have shown that the vesicles of De Graaf exist even in the foetus; and it would seem that during the period of childhood

there is a continual rupture of ovisacs and discharge of ova at the surface of the ovarium. The ovaria are studded with numerous minute copper-colored spots, and their surface presents delicate vesicular elevations, occasioned by the most matured ovisacs; the escape of these takes place by minute punctiform openings in the



SECTION OF GRAAFIAN VESICLE OF A MAMMAL, AFTER VON BAEK.

1. Stroma of the ovary with bloodvessels. 2. Peritoneum. 3 and 4. Layers of the external coat of the Graafian vesicle. 5. Membrana granulosa. 6. Fluid of Graafian vesicle. 7. Granular zone or discus proligerus containing the ovum (8).

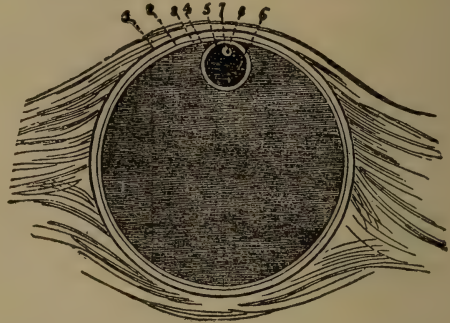


DIAGRAM OF A GRAAFIAN VESICLE CONTAINING AN OVUM.

1. Stroma of the tissue of the ovary. 2 and 3. External and internal tunics of the Graafian vesicle. 4. Cavity of the vesicle. 5. Thick tunic of the ovum or yolk-sac. 6. The yolk. 7. The germinal vesicle. 8. The germinal spot.

peritoneal coat, and no cicatrix is left. The different conditions of progress towards maturation are well seen in the ovary or yolk-bag of the common fowl.

The arteries and veins of the ovaries belong to the spermatic. The arteries pass between the two layers of the broad ligament to the ovary, assuming there a beautiful convoluted arrangement, very similar to the convoluted arteries of the testis. These vessels traverse the ovary nearly in parallel lines, as in the marginal figure, forming numerous minute twigs, which have an irregular knotty appearance, from their tortuous condition, and appear to be chiefly distributed to the Graafian vesicles. The nerves of the ovaries, which are extremely delicate, are from the renal plexuses, and their lymphatics communicate with those of the kidneys.

CHAPTER VIII.

MENSTRUATION.

A Subject of Great Importance—Girl and Woman—Evils of Too Early Marriage—Feeble Parents and Feeble Children—Duration of Monthly Period—Period of Puberty—Very Young Mothers—Close of the Menstrual Function—Some Remarkable Facts—Nature of the Menstrual Discharge—Suppressed by Pregnancy—Effects of Nursing—An Evil Practice—Poverty of Blood—Regularity Important—Effects of Dissipation—“Change of Life”—Profuse Discharges—Nervous Symptoms—Flushes of Heat—Bleeding at the Nose—Hysteria—The Blessing of Health.

“A TREE is known by its fruit;” so a healthy womb—one capable of bearing a child—is known usually by menstruation; for if menstruation be, in every way, properly and healthily performed, there is, as a rule, no reason, as far as the wife is herself concerned, why she should not conceive, carry, and, in due time, bring forth a living child; hence the importance of menstruation—the subject we are now entering upon, and which, indeed, is one of the most important that can engage the attention of every woman, for if menstruation be healthy, the womb is healthy, and the woman, as a rule, is healthy, and capable both of conception and of child-bearing.

There is an important epoch in the life of a woman which might be divided into three stages, namely: (1) the commencement of menstruation—of puberty; (2) the continuation, at regular periods, of menstruation—the child-bearing age; and (3) the close of menstruation—of child-bearing—“the change of life.”

A good beginning at this time is peculiarly necessary, or a girl's health is sure to suffer, and different organs of the body—her lungs, for instance—might become imperilled. A healthy continuation, at regular periods, is much needed, or conception, when she is married, might not be practicable. The close of menstruation requires great attention and skilful management to ward off many formidable diseases, which at the close of menstruation—at “the change of life”—are more likely than at any time to become developed.

Whether, therefore, it be at the commencement, at the continuation, or at the close, watchfulness and care must be paid to the subject, or irreparable mischief might, and probably will, ensue.

Landmark Between the Girl and Woman.

Menstruation—"the periods"—the beginning of the catamenia or the menses—is, then, one of the most important epochs in a girl's life. It is the boundary-line, the landmark, between childhood and womanhood; it is the threshold, so to speak, of a woman's life. Her body now develops and expands, and her mental capacity enlarges and improves. She then ceases to be a child, and becomes a woman. She is now, for the first time, as a rule, able to conceive.

Although puberty has at this time commenced, it cannot be said that she is at her full perfection; it takes eight or ten years more to complete her organization, which will bring her to the age of twenty-three or twenty-five years; which, perhaps, are the best ages for a woman, if she have both the chance and the inclination, to marry.

If she marry when very young, marriage weakens her system, and prevents a full development of her body. Besides, if she marry when she is only seventeen or eighteen, the bones of the pelvis—the bones of the lower part of the trunk—are not at that time sufficiently developed; are not properly shaped for the purpose of labor; do not allow of sufficient space for the head of the child to readily pass, as though she were of the riper age of twenty-three or twenty-five. She might have in consequence a severe and dangerous confinement.

Best Time for Marrying.

Parents ought, therefore, to persuade their daughters not to marry until they are at least twenty-one; they should point out to them the risk and danger likely to ensue if their advice be not followed. They should instil into them that splendid passage from Shakespeare, that—

"Things growing are not ripe until their season."

What wonder that the girl of seventeen or eighteen, whose bones are only half consolidated, and whose pelvis, especially with its mus-

cular and ligamentous surroundings, is yet far from maturity, loses her health after marriage and becomes the delicate mother of sickly children? Parents who have the real interest and happiness of their daughters at heart ought, in consonance with the laws of physiology, to discountenance marriage before twenty, and the nearer the girls arrive at the age of twenty-five before the consummation of this important rite, the greater the probability that, physically and morally, they will be protected against those risks which precocious marriages bring in their train.

If a lady marry late in life, say after she be thirty, the soft parts engaged in parturition are more rigid and more tense, and thus become less capable of dilatation, which might cause, for the first time, a hard and tedious labor. Again, when she marries late in life, she might not live to see her children grow up to be men and women. Moreover, as a rule, "the offspring of those that are very young or very old lasts not." Everything, therefore, points out that the age above indicated—namely, somewhere between twenty-one and thirty—is the most safe and suitable time for a woman to marry.

Is the Race Deteriorating?

Feeble parents have generally feeble children, diseased parents diseased children, nervous parents nervous children—"like begets like." It is sad to reflect, that the innocent have to suffer, not only for the guilty, but for the thoughtless and for the inconsiderate. Disease and debility are thus propagated from one generation to another, and the English race becomes woefully deteriorated.

It is true that people live longer now than formerly; but it is owing to increased medical skill and to improved sanitary knowledge, keeping alive the puny, the delicate and the diseased; but, unfortunately, those imperfect creatures, who swell the ranks of the population, will only propagate puny, delicate and diseased progeny like unto themselves. Not only do children inherit the physical diseases, but they inherit, likewise, the moral and mental infirmities of their parents, and thus are often life-long sufferers.

Menstruation generally comes on once every month—that is to say, every twenty-eight days; usually to the day, and frequently to the very hour. Some ladies, instead of being “regular” every month, are “regular” every three weeks. Each menstruation continues from three to five days; in some for a week, and in others for a longer period. It is estimated that during each “monthly period,” from four to six ounces is, on an average, the quantity discharged.

A lady seldom conceives unless she be “regular,” although there are cases on record where women have conceived who have never had their “periods;” but such cases are extremely rare.

When Menstruation Commences.

Menstruation in this country usually commences at the ages of from thirteen to sixteen, some earlier; occasionally at the ages of eleven or twelve; at other times later, and not until a girl be seventeen or eighteen years of age. Menstruation in large towns is supposed to commence at an earlier period than in the country, and earlier in luxurious than in simple life.

Dr. Carpenter, a well-known authority, says in his “Human Physiology:” “In the human female the period of puberty, or of commencing aptitude for procreation, is usually between the thirteenth and sixteenth years. It is generally thought to be somewhat earlier in warm climates than in cold, and in densely-populated manufacturing towns than in thinly-populated agricultural districts. The mental and bodily habits of the individual have also considerable influence upon the time of its occurrence, girls brought up in the midst of luxury or sensual indulgence undergoing this change earlier than those reared in hardihood and self-denial.

Menstruation continues for thirty, and sometimes even for thirty-five years; and, while it lasts, is a sign that a lady is liable to become pregnant—unless, indeed, menstruation should be protracted much beyond the usual period of time. As a rule, then, when a woman “ceases to be unwell” she ceases to have a family; therefore, as menstruation usually leaves her at forty-five, it is seldom that after that



FETAL SURFACE OF THE PLACENTA (AFTERBIRTH).



age she has a child, yet a recent number of a French medical journal records that "Madame X., of Lauvaur, aged sixty years, was recently delivered of twins."

Having mentioned a case of *late fecundity*, here is a case of *early fecundity*, in which a girl has seven confinements before she was twenty-one years of age! She was married at fourteen—her husband being only fifteen years old!

Some Curious Facts.

Some remarkable cases come to light in the Scotch Registrar-General's report in reference to prolific mothers. One mother, who was only eighteen, had four children; one, who was twenty-two, had seven children, and of two who were only thirty-four, one had thirteen and the other fourteen children; and, on the other hand, two women became mothers as late in life as fifty-one, and four at fifty-two, and one mother was registered as having given birth to a child in the fifty-seventh year of her age.

In very warm climates, such as in Abyssinia and in India, girls menstruate when very young—at ten or eleven years old; indeed, they are sometimes mothers at those ages. But when it commences early it leaves early, so that they are old women at thirty. Physically, we know that there is a very large latitude of difference in the periods of human maturity, not merely between individual and individual, but also between nation and nation—differences so great that in some southern regions of Asia we hear of matrons at the age of twelve.

Dr. Montgomery brings forward some interesting cases of early maturity. He says: "Bruce mentions that in Abyssinia he has frequently seen mothers eleven years of age, and Dunlop witnessed the same in Bengal. Dr. Goodeve, Professor of Midwifery at Calcutta, in reply to a query on the subject, said: 'The earliest age at which I have *known* a Hindu woman bear a child is ten years, but I have *heard* of one at nine.'"

In cold climates, such as Russia, women begin to menstruate late in life, frequently not until they are between twenty and thirty years

old; and, as it lasts on them thirty or thirty-five years, it is not an unusual occurrence for them to bear children at a very advanced age—even so late as sixty. They are frequently not “regular” oftener than three or four times a year, and when it does occur the menstrual discharge is generally sparing in quantity.



SYSTEM OF ARTERIES IN THE
HUMAN BODY.

The Menstrual Discharge.

The menstrual fluid is not exactly blood, although, both in appearance and in properties, it much resembles it; yet it never in the healthy state clots as blood does. It is a secretion from the womb, and, when healthy, ought to be of a bright red color, in appearance very much like blood from a recently cut finger.

The menstrual fluid ought not, as before observed, to clot. If it does, a lady, “during her periods,” suffers intense pain; moreover, she seldom conceives until the clotting has ceased. Application must therefore, in such a case, be made to a medical adviser, who will soon relieve the above painful symptoms, and, by doing so, will probably pave the way to her becoming pregnant.

Menstruation ceases entirely in pregnancy, during suckling, and usually both in diseased and in disordered states of the womb. It also ceases in cases of extreme debility, and in severe illness, especially in consumption; indeed, in the latter disease—consumption—it is one of the most unfavorable of the symptoms.

It has been asserted, and by men of great experience, that some-

times a woman menstruates during pregnancy. It appears utterly impossible that she should be able to do so. The moment she conceives the neck of the womb becomes plugged up by means of mucus; it is, in fact, hermetically sealed. There certainly is sometimes a slight red discharge, looking very much like menstrual fluid, and coming on at her monthly periods, but being usually very sparing in quantity and lasting only a day or so, and sometimes only for an hour or two; but this discharge does not come from the cavity of, but from some small vessels at the mouth of, the womb, and is not menstrual fluid at all, but a few drops of real blood. If this discharge came from the cavity of the womb, it would probably lead to a miscarriage. Good authorities declare that it would be quite impossible during pregnancy for menstruation to occur. They consider that the discharge which was taken for menstruation arose from the rupture of some small vessels about the mouth of the womb.

Effects of Suckling.

Some ladies, though comparatively few, menstruate during suckling; when they do, it may be considered not the rule but the exception. It is said, in such instances, that they are more likely to conceive, and no doubt they are, as menstruation is an indication of a proneness to conception. Many persons have an idea that when a woman, during lactation, menstruates, her milk is both sweeter and purer. Such is an error. Menstruation during suckling is more likely to weaken the mother, and consequently to deteriorate her milk. It therefore behooves a parent never to take a wet nurse who menstruates during the period of suckling.

During "the monthly periods," violent exercise is injurious; iced drinks and acid beverages are improper; and bathing in the sea, and bathing the feet in cold water, and cold baths, are dangerous; indeed, at such times as these, no risks should be run, and no experiments should, for one moment, be permitted, otherwise serious consequences will, in all probability, ensue. "The monthly periods" are time not to be trifled with, or woe betide the unfortunate trifler!

The pale, colorless complexion, helpless, listless, and almost lifeless young ladies, that are so constantly seen in society, usually owe their miserable state of health either to absent, to deficient, or to profuse menstruation. Their breathing is short—they are soon “out of breath;” if they attempt to take exercise—to walk, for instance, either up stairs or up a hill, or even for half a mile on level ground—their breath is nearly exhausted—they pant as though they had been running quickly. They are ready, after the slightest exertion or fatigue, and after the least worry or excitement, to feel faint, and sometimes to actually swoon away.

It therefore behooves mothers to seek early for their girls medical aid, and that before irreparable mischief has been done to the constitution. How many a poor girl might, if this advice had been early followed, have been saved from consumption, and from an untimely grave, and made a useful member of society; but, alas! like many other things in this world, mothers will not “hearken unto counsel” until it be too late—too late; and then, at the eleventh hour, doctors are expected to work miracles!

A Pernicious Practice.

There is an evil practice, which, as it is very general, requires correction, namely, the giving of gin by a mother to her daughter at the commencement of each of “her periods,” more especially if she be in much pain. This practice often leads a girl to love spirits—to become, in the course of time, a drunkard. There are other remedies, not at all injurious, that medical practitioners give at these times, and which will afford both speedier and more effectual relief than gin.

If a single lady, who is about to be married, have either painful, or scanty, or too pale, or too dark menstruation, it is incumbent on either her mother or a female friend to consult, two or three months before the marriage take place, an experienced medical man on her case; if this be not done, she will most likely, after marriage, either labor under ill-health, or be afflicted with barrenness, or, if she do conceive, be prone to miscarry.

In a pale, delicate girl or wife, who is laboring under what is popularly called poverty of blood, the menstrual fluid is sometimes very scant, at others very copious, but is, in either case, usually very pale—almost as colorless as water—the patient being very nervous, and even hysterical. Now, these are signs of great debility ; but, fortunately for such a one, a medical man is, in the majority of cases, in possession of remedies that will soon make her all right again.

Too Weak to Bring Forth.

A delicate girl has no right, until she be made strong, to marry. If she should marry, she will frequently, when in labor, not have strength to bring a child into the world ; which, provided she be healthy and well-formed, ought not to be. How graphically the Bible tells of delicate women not having strength to bring children into the world : “ For the children are come to the birth, and there is not strength to bring forth.”—2 Kings, xix. 3.

When a lady is neither pregnant nor “ regular,” she ought immediately to apply to a doctor, as she may depend upon it there is something wrong about her, and that she is not likely to become *enceinte* until menstruation be properly established. As soon as menstruation be duly established, pregnancy will most likely, in due time, ensue

What Is Meant by Being Regular.

When a lady is said to be “ regular,” it is understood that she is “ regular ” as to “ quality,” and quantity, and time. If she be only “ regular ” as to the time, and the quantity be either deficient or in excess ; or, if she be “ regular ” as to the time, and the quality be bad, either too pale or too dark ; or if she be “ regular ” as to the quality and quantity, and be irregular as to the time, she cannot be well, and the sooner means are adopted to rectify the evil, the better it will be both for her health and for her happiness.

A neglected miscarriage is a frequent cause of unhealthy menstruation ; and until the womb, and in consequence “ the periods,” by judicious medical treatment, be made healthy, there is indeed but scant chance of a family.

We have no doubt that alcohol, among fashionable ladies, and which they take in quantities—"to keep them up to the mark," as they call it—is one great cause of hysteria; ladies who never taste alcohol in any form seldom labor under hysteria. And why is it so? Alcohol at all in excess, depresses the system, and thus predisposes it to hysteria, and to other nervous affections.

A lady who is not a votary of fashion, and who is neither a brandy-drinker or a wine-bibber, may have hysteria—one, for instance, who has naturally a delicate constitution, or who has been made delicate by any depressing cause. A large family of children, repeated miscarriages, and profuse menstruation, are three common causes of hysteria; indeed, anything and everything that produces debility will induce hysteria.

"Change of Life."

As soon as a lady ceases to be "after the manner of women"—that is to say, as soon as she ceases to menstruate—it is said that she has a "change of life;" and if she does not take proper care, she will soon have "a change of health" to boot, which in all probability will be for the worse. "Change of life" is sometimes called "the critical period." It well deserves its name—it is one of the critical periods of a woman's life, and oftentimes requires the counsel of a doctor experienced in such matters to skilfully treat.

After a period of about thirty years' continuation of "the periods," a woman ceases to menstruate—that is to say, when she is about forty-four or forty-five years of age, and, occasionally, as late in life as when she is forty-eight years of age, she has "change of life," or, as it is sometimes called, "a turn of years"—"the turn of life." Now, before this takes place, she oftentimes becomes very "irregular;" at one time she is "unwell" before her proper period; at another time either before or after; so that it becomes a "dodging time" with her, as it is styled. In a case of this kind menstruation is sometimes very profuse; it is at another very sparing; occasionally it is light-colored, almost colorless; sometimes it is as red as from a cut finger; while now and then it is as black as ink and as thick as molasses.

When a lady is about having "change of life," violent flooding is apt to come on—as profuse as though she were miscarrying. Thus violent flooding is often the end of her "periods," and she sees no more of them. Others, again, more especially the active and abstemious, suffer so little at "change of life," that, without any premonitory symptoms whatever, it suddenly, in due time, leaves them—they, the while, experiencing neither pain nor inconvenience.

A lady in "change of life" usually begins to feed, fat more especially accumulates about the bosom and about the abdomen, thus giving her a matronly appearance, and, now and then, making her believe that she is *enceinte*, especially if the wish be father to the thought. So firmly has she sometimes been convinced of her being in an interesting condition, that she has actually prepared baby-linen for the expected event, and has even engaged her monthly nurse. Now, it would be well, before such a one had made up her mind that she be really pregnant, to consult an experienced doctor in the matter, and then her mind will be set at rest, and all unpleasant gossip and silly jokes will be silenced. Skilled knowledge, in every doubtful case, is the only knowledge worth the having; the opinion of old women, in such matters, is indeed of scant value!

Nervous Affections.

She has peculiar pains, sometimes in one place and then in another; the head is often affected, at one time the back, at another time the front, over her eyes, light and noise having but little or no effect in aggravating the headache. She is very "nervous," as it is called, and has frequent flutterings of the heart, and sudden flushings of the face and neck—causing her to become, to her great annoyance, as red as a peony!

She has swellings and pains of her breast, so as often to make her fancy that she has some malignant tumor there. She is troubled much with flatulence, and with pains, sometimes on the right, and at other times on the left side of the belly; the flatulence is occasionally most outrageous, so as to cause her to shun society, and to make her

life almost burdensome. She has not only "wind" in the bowels, but "wind" in the stomach, which frequently rises up to her throat, making her sometimes hysterical; indeed, she is often hysterical—a little thing making her laugh and cry, or both the one and the other in a breath. She has frequently pains in her left side—in the region of the short ribs. She has pains in her back—in the lower part of her back—and low down in her abdomen.

The nose is, at these times, very much inclined to bleed, more especially at what was formerly her "periods;" here nature is doing all she can to relieve her, and, therefore, should not unnecessarily be meddled with, but the nose should be allowed to bleed on, unless indeed the bleeding be very profuse.

Eruptions of the skin, more especially on the face, are, at such times, very apt to occur, so as to make a perfect fright of a comely woman; there is one comfort for her, the eruption, with judicious treatment, will gradually disappear, leaving no blemish behind.

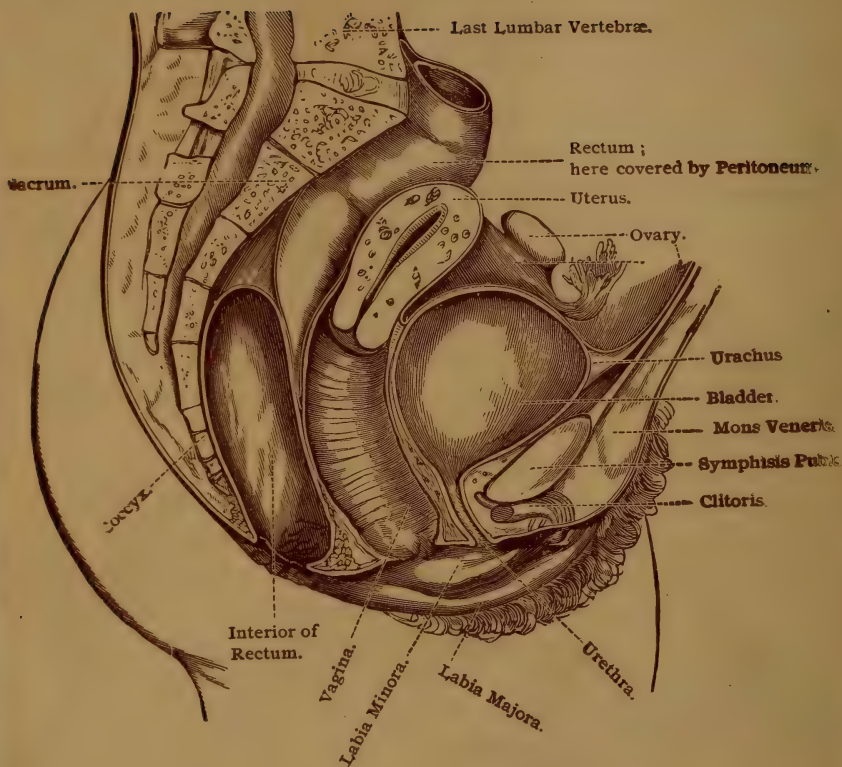
Danger of Neglect.

The above symptoms, either a few or all of them, are, in "change of life," of common occurrence, and require the assistance of a doctor experienced in such matters. If the above symptoms be neglected, serious consequences might, and most likely will ensue; while, on the other hand, if they be properly treated, such symptoms will gradually subside, leaving her in excellent health—better, probably, than she has been in for years, more especially if her constitution had been previously weakened by repeated childbirths.

Fat is apt at these times to accumulate about the throat and about the chin—giving her a double chin. There is oftentimes, too, a slight indication of a beard.

We sometimes hear of a lady being "fat, fair and forty." Now, when a wife, at the age of forty, suddenly becomes very fat, however "fair" she may be, and she is often very fair, she seldom has any more family, even though she be "regular"—the sudden fatness often denoting premature "change of life." If such a one had, before the





SECTION OF FEMALE PELVIS AND ORGANS.

fat had accumulated, taken more out-door exercise, she would, in all probability, have kept her fat down, and would thus have prevented premature "change of life."

Active, bustling women are seldom very fat, and sometimes have their "periods" until they are forty-eight years of age; indeed, they occasionally bear children at that age, and have splendid confinements. How true it is, that luxurious living and small families, and hard and tedious labors and premature decay, generally go hand in hand together! But so it is, and so it always will be; luxury draws heavy bills on the constitution, which must eventually be paid, and that with heavy and with compound interest.

Meddling with Nature.

Bleeding piles are very apt to occur in "change of life;" they frequently come on periodically. Now, bleeding piles, at such times as these, may be considered a good sign as an effort of nature to relieve herself, and to be very beneficial to health, and, therefore, ought not, unless very violent, to be interfered with, and certainly not without the consent of a judicious medical man. Meddling with nature is a dangerous matter, and is a hazardous game to play!

When "change of life" is about, and during the time, and for some-time afterwards, a lady labors under at times, as above stated, great flushings of heat; she, as it were, blushes all over; she grows very hot and red, almost scarlet, then perspires, and afterwards becomes cold and chilly. These flushings occur at very irregular periods; they might come on once or twice a day, at other times only once or twice a week, and occasionally only at what would have been her "periods." These flushings might be looked upon as rather favorable symptoms, and as a struggle of nature to relieve herself through the skin. These flushings are occasionally attended with hysterical symptoms. A little appropriate medicine is for these flushings desirable.

A lady while laboring under these heats is generally both very much annoyed and distressed; but she ought to comfort herself with the knowledge that they are in all probability doing her good service,

and that they might be warding off from some internal organ of her body serious mischiefs.

Better Health May be Expected.

"Change of life" is, then, one of the most important periods of a lady's existence, and generally determines whether, for the rest of her days, she shall either be healthy or otherwise; it therefore imperatively behooves her to pay attention to the subject, and in all cases, when it is about taking place, to consult a medical man, who will, in the majority of cases, be of great benefit to her, as he will be able not only to relieve the symptoms above enumerated, but to ward off many important and serious diseases to which she would otherwise be liable. When "change of life" ends favorably, which, if properly managed, it most likely will do, she may improve in constitution, and may really enjoy better health and spirits, and more comfort than she has done for many previous years.

A lady who has during her wifehood eschewed fashionable society, and who has lived simply, plainly and sensibly, who has avoided brandy-drinking, and who has taken plenty of out-door exercise, will, during the autumn and winter of her existence, reap her reward by enjoying what is the greatest earthly blessing—health! Not only her health will be established, but her comeliness and youthfulness will be prolonged. Although she might not have the freshness and bloom of youth—which is very evanescent—she will probably have a beauty of her own—which is oftentimes more lasting than that of youth—telling of a well-spent life.

It is surprising how soon a fashionable life plants crow-feet on the face and wrinkles on the brow; indeed, a fashionist becomes old before her time; and not only old, but querulous and dissatisfied; nothing ages the countenance, sours the temper, and interferes with "the critical period," more than a fashionable life. Fashion is a hard, and cruel, and exacting creditor, who will be paid to the uttermost farthing,

"See the wild purchase of the bold and vain,
Whose every bliss is bought with equal pain."

CHAPTER IX.

CONCEPTION.

The Seminal Animalcule—Body and Soul—Birth and Genius—Children of all Races Resemble their Parents—Each Parent an Agent—Testes and Ovaries—Zoosperms or Spermatozoa—How Impregnation Takes Place—Vast Numbers of Zoosperms—Egg of the Fowl—Most Favorable Period for Conception—How the Generative Act should be Performed—When Impregnation is not Likely to Take Place—Limiting the Number of Children—Prevention of Conception.

THE formation of the zoosperm, or seminal animalcule, in man, and the ovum in woman, belongs to the domain of organic life, yet all the highest powers of the soul and the soul's organs are engaged in the work. For there is to be more than a mere bodily organization formed—a mass of bone, muscle, and various tissues. First of all, there is to be generated an immortal soul.

The generation of souls seems necessary, indeed, to explain the facts of the hereditary transmission of moral and mental, as well as physical qualities. The souls of children—their moral characters—are like those of their parents, and compounded of those of their fathers and mothers, some more resembling one, some the other. We never find the soul of a European in the body of a Hottentot, or the soul of a North American Indian in the body of a native of China.

How Character is Formed.

Two human beings, uniting as one, becoming "one flesh," have thus given to them the power or are the appointed instruments of generating a third being—body, soul and spirit. They form it according to their own capacities. Or, if the soul have any other origin, it must be admitted that they limit its expression and development, and all its earthly manifestation; so that there are great and little souls, beautiful and ugly souls, and so on of all varieties of human character.

But it must also be admitted that there are facts of human intelligence and goodness not easily accounted for upon the theory of

hereditary transmission. How came a Shakespeare to spring up in Warwickshire? What do we know of the progenitors of our greatest geniuses in every department of human achievement? We must admit other influences—supernal inspirations.

It may be that if we could know the conditions and peculiar relations and elevations of the souls of parents in the generation of souls of genius, we might see a solution of the mystery. But leaving out such apparently exceptional facts, we can see that, as a general rule, in families, nations and races the children resemble their parents. English, Scottish, Welsh and Irish have peculiarities as marked as Chinese, Negroes, North American Indians and Esquimaux.

And the soul grows as the body grows, and changes as the body changes, and grows strong by exercise, and great by the reception of soul nutriment, and is prepared to generate still higher souls; and this is the law of education, development and progress. So we have diseases of the soul as of the body, these reacting on each other, and each susceptible of proper curative treatment. Does not the mind feed on thoughts and feelings, and get starved or surfeited, and grow dyspeptic on trash or sweetmeats, or exhilarated and intoxicated? Who has not felt his whole soul strengthened by communion with some strong spirit?

Male and Female Organs.

This sublime function of the generation of human beings, soul and body, is performed by the two male and female organs, the testes and the ovaries, acted upon by every human faculty and modified by every human circumstance and action.

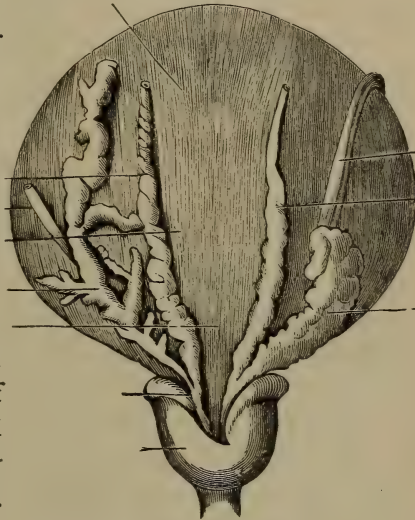
It is not in our power to solve the questions respecting the portions of the mental and physical organization contributed by either parent. We see no reason to believe in any such partition. We think each has a share in the formation of every part, though in any part the influence of one or the other may preponderate. A child may resemble either of its parents or both, or it may be more like one of its grandparents than either. It may have more of the mind of one, or the physical constitution of the other, or both may be evenly mingled.

If a man have a powerfully-developed and active mind and a woman a vigorous organic system, it is likely that their child will resemble each in their strongest points. Germ cell and sperm cell, we believe, are both engaged in the formation of every faculty and organ.

The sperm cell is the result of the action of that complex organ, the testicle—an organ composed of a vast surface of tubular structure, and amply supplied with nerve and blood, by which and out of which these animate cells are formed. Then, within the primitive sperm cell, appear cells, and within these are formed, first in a circular mass, a great number of exceedingly minute living beings, consisting of an oval-shaped body and a long tail.

This self-propelling cell swims in a fluid substance like the white of an egg, but more opaque, formed partly in the testes and partly secreted by the prostate gland. In full health and vigor, these zoosperms are very numerous and active; in sickness or exhaustion

they are few and weak, and in certain states of the system they entirely disappear, and the power of fecundation no longer exists.



THE BLADDER, PROSTATE GLAND AT ITS BASE AND VESICULÆ SEMINALES EXTENDING UP ITS SIDES.

How the Spermatozoa are Set Free.

The primitive germ cell first bursts, setting free the smaller cells, and these, in turn, liquefy and set free the now perfected zoosperms; the seminal fluid containing them then passes on through the vasa deferentia, up the spermatic cord, passes through the walls of the abdomen, and is received with the prostatic fluid, according to the

common belief, into the seminal vesicles, which are a reservoir in which it is retained, until expelled by the action of the proper muscular apparatus in the sexual orgasm.

The zoosperms retain their power of motion, under favorable circumstances, for hours, and even days, after being ejected. In fish, which do not copulate, they swim about in the water until they come in contact with the eggs spawned by the female. The ripe eggs or hard roe may be taken from the body of a female fish, and the testicle or soft roe from the male, and fecundation produced by mingling them together, and ponds and rivers may be stocked with fish by this mode of artificial impregnation.



THE SPERMATOZOA
OR LIFE GERMS
OF THE MALE.

Spermatic Fluid and the Ovaries

In the generation of mammalia the spermatic fluid should be thrown into the mouth of the uterus, and, then, by the contractions of that organ, forced up the Fallopian tubes toward the ovaries. But circumstances may prevent this being accomplished. There may be some malformation, and still impregnation may take place, for the active zoosperms, in great numbers, move every way with a rapid motion, and are able to find their way through the entire length of vagina, uterus and Fallopian tubes.

On the other hand, when the womb is too low in the common ailment of falling of the womb, the semen may pass beyond the mouth of the womb, and be lodged in a deep fold of the vagina, which may prevent impregnation.

While the testicles are engaged in the evolution of zoosperms, the ovaries of the female are no less active in forming and ripening the ova; but with this striking difference, that, while zoosperms are formed by millions, and may be ejected day after day, we have but one or two, or in rare cases, from three to five, ova perfected once a month, and this process ceases during gestation, and should also be suspended during lactation. The ovum, or egg, which, in all its essential parts,

is alike in all animals, and which consists of a cell, a nucleus, and a nucleolus, is found in the stroma or mass of the ovary.

The egg of the common fowl may be taken as the type of all eggs. Its yolk and white are of immense bulk, compared with its germinal spot, because there must be contained within the shell the entire matter of which the perfect chicken is formed. In the human ovum this matter is small in quantity, as the foetus, from an early period, is nourished by the blood of the mother in the uterus.

When this egg is fully formed, ripened, or matured, the cell which envelops it, swells, bursts, and sets it free. It is then grasped by the fimbriated extremity of the Fallopian tube, and begins its journey down that passage to the uterus. It may be impregnated at any time after it is set free by the bursting of the Graafian vesicle, until its arrival in the uterus, and possibly until its expulsion from that receptacle.

Laws of Conception.

It will be seen that conception can only take place under certain well-defined circumstances. First, there must be a ripened ovum, set free from its Graafian vesicle. This takes place regularly once a month, after the period of puberty, and in all healthy females is marked by the menstrual evacuation. If this evacuation is coincident with the expulsion of the ovum from the ovary, impregnation must take place, if at all, within eight, or, at most, twelve days of that period.

The zoosperms may meet the ovum on its passage, or, possibly, the ovum may find the zoosperm awaiting its arrival. It follows that sexual connection, to answer the natural end, should take place not more than three days before the beginning, or within ten days after the menstrual evacuation.

But in the diseases and irregularities of our lives, with the excitements of stimulating food and general false habits, with the continual over-excitement and exercise of the generative organs, these processes become irregular and their normal signs not to be depended on. Ova may be prematurely ripened by excitement of the ovaries, caused by sexual indulgence.

The menstrual evacuation, which degenerates into a real hemorrhage, becomes irregular and uncertain, as well as depraved in its character. Consequently, the rule that sexual union, to produce impregnation, must take place either immediately before or a few days after menstruation, admits of exceptions. It is a safe rule for those who desire to procreate; but not entirely safe for those who would avoid it, as many, for good reasons, may.

A Test of Health.

Menstruation appears to be the throwing off of the fluids concerned in the ripening and expulsion of the ova. In a perfectly healthy state the menstrual fluid is very small in quantity, and somewhat tinged with the red coloring matter of the blood. In disease, it becomes a genuine hemorrhage, lasts for three or four days, or longer, with the loss of several ounces of blood, mingled with the proper menstrual fluid. There is no better test of the health of a woman than the one we have just given.

In what manner the actual impregnation of the ovum takes place, we have no positive knowledge. Microscopic observers assert that they have seen the zoosperm enter the ovum by an opening left for that purpose. It has even been fancied that the body and tail of the seminal animalcule form the rudiments of the brain and spinal cord. Observations of the progress of foetal development warrant no such conclusion. If it could be established it would prove that the animal system of nerves was formed by the male parent and the organic by the female. The resemblance of children to their parents, and all the phenomena of hereditary transmission of qualities, prove that both parents are concerned in the production of every part.

We have, then, two objects here of microscopic minuteness. One is the germinal point in the female ovum; the other is the zoosperm, or some portion of it. In each of these minute organizations are comprised the elements of a glorious and immortal being. Each contains, moreover, the rudiments of the very form and qualities of that being, physical, moral and intellectual. There, in that point of



SWEET SIXTEEN



THE GAME OF MUSICAL CHAIRS



CONSULTING HER PROGRAMME



AN EVENING MUSICAL

matter, that pellucid cell, we have the shape and air, the talents and genius, the honesty or roguery, the pride or humility, the benevolence or selfishness of the future man. We have what determines the form of his head and hands, the contour of his nose and chin, the color of his eye and hair. Moreover, this spermatic animalcule, or this cell-germ, has all hereditary idiosyncrasies and diseases—gout, scrofula, venereal taint, or insanity.

Life and Character in the Germ and Spermatozoon.

We can scarcely conceive of this, yet we must admit it. All the grand and energetic qualities that made a Cæsar or a Napoleon—all that can be fairly attributed to blood and birth, to hereditary influences—must have been contained in one or both these atoms.

We do not underrate the influences that may act upon the fœtus during gestation. We give full credit to the power of education in forming the human character, but we assert that all which makes the basis of the character, mental and physical, must reside in the germ and the spermatozoon, and must combine at the moment of impregnation, or the union of these principles.

For all the qualities of soul and body which make the differences between a mouse, a dog, a horse, an elephant, must be in their germinal principles. The appearance of the zoosperms in different animals varies slightly under the microscope—that of the ova scarcely at all. Moreover, when two nearly allied species of animals engender—when, for example, the zoosperm of the ass unites with the ovum of the mare—each parent is found to contribute to the mental and physical qualities of the offspring. In all crossings of different breeds of animals, we find the same effects produced, the more powerful impressing themselves most strongly, and the two sexes giving each certain peculiar characteristics.

Nor is this by any means less notably the fact in the human species. When sexual commerce takes place between a negro and a white woman, the child partakes of the mental and physical qualities of both.

If we do not understand the process by which the union of the male and female elements is accomplished, in the generation of the new being, the conditions under which it must take place are more clear to us. From a multitude of observations it appears :

1. That the ovum, in a state of healthy maturity, must have been set free from the ovary. This is not the case with some of the lower animals. There are insects in whom a single act of the male will fecundate successive generations. In birds, the male principle seems to be added before the egg is mature.

2. The sperma must be recent, and must contain living, active zoosperms.

3. The smallest quantity, and probably a single zoosperm, is sufficient, if it comes in contact with the ovum.

4. It is not necessary that there should be any enjoyment of coition on the part of the female. Women who have none, seem even more prolific than others. It may take place in sleep, or other insensibility. In men, also, the orgasm may be accompanied with no pleasure, and even with pain.

5. Even the sexual union is not indispensable. There is no doubt that a female ovum may be impregnated by semen conveyed to it artificially ; and a woman, if she chose, might have a child without ever coming into personal contact with a man. This has been shown in animals by abundant experiments, and is said to have occurred in human subjects. There is, however, not the slightest reason to doubt the result, if the experiment were fairly tried.

Points to be Considered.

There are a few other points of interest which may as well be discussed here as elsewhere. Few questions are of more practical importance to the human race than under what circumstances the generative act should be performed. We will give our opinion briefly, stating the reasons where they are not self-evident or apparent.

1. The generative act should be performed by two persons arrived

at a full development of their powers, physical and intellectual. The children of young and immature parents are apt to be weak and scrofulous. Age cannot be given as an absolute index of maturity, and there are some who are never mature.

2. It should be performed with all the attraction and charm of a mutual love ; and the existence of this is the best evidence that the parties are suitably related to each other ; for those similarities of constitution, which forbid the marriage of near relations, and which often exist without consanguinity, and are sometimes wanting with it, also prevent a true love. Hence, marriages of family interest, convenience, similarity of tastes, and friendship, may be very unfortunate with respect to children. Love and its functions require a mingling of opposite qualities. No man ought ever to beget a child for a woman he does not love ; and, especially, no woman ought ever to submit to sexual embrace of a man, unless assured that the union is sanctioned by a mutual affection.

3. It should not be performed by man or woman so as to entail hereditary disease upon their offspring. Insanity, scrofula, consumption, syphilis, diseased amateness, deformities of body, or distressing singularities of mind, should not be entailed upon posterity.

4. A woman should avoid conception if her pelvis is so small or so deformed as to hazard her own life in delivery, or destroy that of the child, or compel an abortion.

5. In the present social state, men and women should refrain from having children, unless they see a reasonable prospect of giving them suitable nurture and education. We have no right to inflict an injury upon an individual or society.

How Prevented.

But how is pregnancy to be prevented ? There is one way that is natural, simple and effectual. It is to refrain from the sexual act. It is easily done by most women and by many men. In every civilized community thousands live in celibacy, many from necessity, many from choice. In England and the older American States, there is a

large surplus female population. In Catholic countries the whole priesthood and great numbers of religious, of both sexes, take vows of perpetual chastity. This practice has existed for at least sixteen centuries.

We have shown that in ordinary cases conception can only take place when connection is had a day or two before, or ten, or, for safety's sake, say sixteen days after menstruation. There is, then, a fortnight each month, when the female is not liable to impregnation ; but it must be remembered that if she is amatively excited in this interval, the ripening of the ova may be hastened, and the very result precipitated that it is intended to avoid.

Limiting the Number of Children.

And it is also to be observed that the natural period for sexual union is when it is demanded for the purpose of procreation, and that the use of marriage or the sexual act for mere pleasure, and using any means to avoid impregnation, are unnatural. It is questionable, therefore, whether we can morally justify the use of any means to prevent conception. If it can ever be justified it is when a woman is unwillingly compelled to submit to the embraces of her husband, while her health or other conditions forbid her to have children.

The limitation of the number of children is advocated as a right and a duty by a class of social reformers, who, at the same time, insist upon the right and even duty of frequent gratification of the amative propensities by all persons who have arrived at the age of puberty. Virtue, chastity, continence, they denounce as unnatural and mischievous.

We hold, on the contrary, that the law of a pure and unperverted nature is the law of chastity, and that it is consistent with the highest health, and the best bodily, mental, and moral condition of men and women ; and that men and women can and ought to be as natural and moral at least as the lower orders of the animal creation.

The secular philanthropists who teach that it is not only right, but

the duty of all persons, married or single, from the age of puberty, to have frequent and regular exercise of amateness ; who hold that what good men in all ages have called virtue is a vice, that chastity is wickedness and continence criminality, and that lewdness, fornication and adultery are moral duties, are obliged also to advocate the use of preventive checks to an increase of population.

On the subject of prevention a well known authority says : "In the human female it is supposed that the spermatozoa will retain their moving power for thirty-six hours after coitus, or connection with the male. Common water at low temperature rapidly arrests their movements, while dilute saline solutions, or sugar and water, on the other hand, appear to have very little influence upon their actions. The chemical agents are the only ones that have positive injurious effects upon the movements of spermatozoa. They not only stop their operations but dissolve their structure and change their composition. For instance, alcohol, acids, metallic salts, narcotics and strychnine have similar effects to common cold water. Mineral and vegetable acids destroy the life of the semen as readily as electricity."

CHAPTER X.

PREGNANCY.

~~C~~essation of Menses—Morning Sickness—Pains in the Breast—Quickening—Fut-
tering Motions—Flatulence—Increase in Size—Emaciation—Heartburn—Mor-
bid Longings—Excitability of Mind—Suitable Clothing—Ablutions—Air and
Exercise—Evils of Indolence—Ventilation and Drainage—Horrid Odors—
Disinfectants—Pain a Warning—Hotbeds of Disease—Pure Water—Benefits
of Rest—What to Eat—Spices and Condiments—Abuse of Stimulants—Rest-
lessness and Sleep.

A HEALTHY married woman, during the period of child-bear-
ing, suddenly “ceasing-to-be-unwell,” is of itself alone almost
a sure and certain sign of pregnancy—requiring but little else
besides to confirm it. This fact is well known by all who have had
children—they base their predictions and their calculations upon it,
and upon it alone, and are, in consequence, seldom deceived.

But as “ceasing-to-be-unwell” may proceed from other causes than
that of pregnancy—such as disease or disorder of the womb, or of
other organs of the body—especially of the lungs—it is not by itself
alone entirely to be depended upon; although, as a single sign, it is,
especially if the patient be healthy, the most reliable of all the
signs of pregnancy.

The next symptom is morning sickness. This is one of the earliest
symptoms of pregnancy, as it sometimes occurs a few days, and,
indeed, generally not later than a fortnight or three weeks after con-
ception. Morning sickness is frequently distressing, oftentimes
amounting to vomiting and causing a loathing of breakfast. This
sign usually disappears after the first three or four months. Morning
sickness is not always present in pregnancy, but, nevertheless, it is a
frequent accompaniment, and many who have had families place more
reliance on this than on any other symptom. Morning sickness is one
of the earliest, if not the very earliest, symptom of pregnancy, and is
by some ladies taken as their starting-point from which to commence
making their “count.”

Morning sickness, then, if it does not arise from a disordered stomach, is one of the most trustworthy signs of pregnancy. A lady who has once had morning sickness can always for the future distinguish it from each and from every other sickness ; it is a peculiar sickness, which no other sickness can simulate. Moreover, it is emphatically a morning-sickness—the patient being, as a rule, for the rest of the day entirely free from sickness, or from the feeling of sickness.

Darting Pains in the Breast.

A third symptom is shooting, throbbing and lancinating pains, and enlargement of the breast, with soreness of the nipples, occurring about the second month, and in some instances, after the first few months, a small quantity of watery fluid, or a little milk, may be squeezed out of them. This latter symptom, in a first pregnancy, is valuable, and can generally be relied on as conclusive that the female is pregnant. It is not so valuable in an after pregnancy, as a little milk might, even should she not be pregnant, remain in the breasts for some months after she has weaned her child.

Milk in the breast—however small it might be in quantity—is, especially in a first pregnancy, a very reliable sign ; indeed, we might go so far as to say a certain sign of pregnancy. The veins of the breast look more blue, and are consequently more conspicuous than usual, giving the bosom a mottled appearance. The breasts themselves are firmer and more knotty to the touch. The nipples, in the majority of cases, look more healthy than customary, and are somewhat elevated and enlarged ; there is generally a slight moisture upon their surface, sufficient in some instances to mark the linen.

Dark Circle Around the Nipple.

A dark-brown areola or disc may usually be noticed around the nipple, the change of color commencing about the second month. The tint at first is light brown, which gradually deepens in intensity, until towards the end of pregnancy the color may be very dark. Dr. Montgomery, who has paid great attention to the subject, observes :

"During the progress of the next two or three months the changes in the areola are in general perfected, or nearly so, and then it presents the following characters: A circle around the nipple, whose color varies in intensity according to the particular complexion of the individual, being usually much darker in persons with black hair, dark eyes and sallow skin, than in those of fair hair, light-colored eyes and delicate complexion. The area of this circle varies in diameter from an inch to an inch and a half, and increases in most persons as pregnancy advances, as does also the depth of color. There is a puffy turgescence, not only of the nipple, but of the whole surrounding disc."

A dark-brown areola or mark around the nipple is one of the distinguishing signs of pregnancy—more especially of a first pregnancy. Women who have had large families, seldom, even when they are not *enceinte*, lose this mark entirely, but when they are pregnant it is more intensely dark—the darkest brown—especially if they be brunettes.

The Period of Quickening.

A fourth symptom is quickening. This generally occurs about the completion of the fourth calendar month; frequently a week or two before the end of that period, at other times a week or two later. A lady sometimes quickens as early as the third month, while others, although rarely, quicken as late as the fifth, and in very rare cases, the sixth month. It will, therefore, be seen that there is an uncertainty as to the period of quickening, although, as we before remarked, the usual period occurs either on or more frequently a week or two before the completion of the fourth calendar month of pregnancy.

Quickening is one of the most important signs of pregnancy, and one of the most valuable, as the moment she quickens, as a rule, she first feels the motion of the child, and at the same time she suddenly becomes increased in size. Quickening is a proof that she is nearly half her time gone; and if she be able to miscarry, quickening makes her more safe, as she is less likely to miscarry after than before she has quickened.



THE SERENADE



"A LOVELY FLOWER CAST IN HUMAN MOULD."

A lady at this time frequently either feels faint or actually faints away; she is often either giddy or sick or nervous, and, in some instances, even hysterical, although, in some rare cases, some women do not even know the precise time when they quicken.

A Peculiar Fluttering.

The sensation of "quickenings" is said by many ladies to resemble the fluttering of a bird; by others, it is likened to either a heaving, or beating, or rearing, or leaping sensation; accompanied, sometimes, with a frightened feeling. These flutterings, or heavings, or beatings, or leaping, after the first day of quickening, usually come on half a dozen or a dozen times a day, although it might happen for days together, the patient does not feel the movement of the child at all, or if she does, but very slightly.

The more frequent description a lady, when she has first "quickened," gives of her feelings is, that it is more like "the flutterings of a bird;" when she is about another month gone with child—that is to say, in her sixth month—that it more resembles "a leaping in the womb," or in the expressive language of the Bible, "the babe leaped in her womb." The difference of the sensation between "fluttering" and "leaping" might in this wise be accounted for; the child between four and five months is scarcely old enough, or strong enough, to leap—he is only able to flutter; but when the mother is in the sixth month (as the case recorded in the Holy Scriptures), the child is stronger, and he is able to leap; hence the reason why he at first flutters and after a time leaps.

What Causes Quickenings.

"Quickenings" arises from the ascent of the womb higher into the abdomen, as, from the increased size, there is not room for it below. Moreover, another cause of quickening is, the child has reached a further stage of development and has, in consequence, become stronger both in its muscular and nervous structure, so as to have strength and motion of his limbs powerful enough to kick and plunge about the

womb, and thus to give the sensation of "quickening." The old-fashioned idea was that the child was not alive until a woman had quickened. This is a mistaken notion, as he is alive, or "quick," from the very commencement of his formation.

Flatulence has sometimes misled a young wife to fancy that she has quickened; but, in determining whether she be pregnant, she ought never to be satisfied with one symptom alone; if she be, she will frequently be misled. The following are a few of the symptoms that will distinguish the one from the other: In flatulence, the patient is small one hour and large the next; while in pregnancy the enlargement is persistent, and daily and gradually increases. In flatulence, on pressing the bowels firmly, a rumbling of wind may be heard which will move about at will; while the enlargement of the womb in pregnancy is solid, resistant, and stationary. In flatulence on tapping—percussing—the abdomen, there will be a hollow sound elicited, as from a drum; while in pregnancy it will be a dull, heavy sound, as from thrumming on a table. In flatulence, if the points of the fingers be firmly pressed into the belly, the wind will wobble about; in pregnancy, they will be resisted as by a wall of flesh.

Increased Size of the Abdomen.

The fifth symptom is, immediately after the quickening, increased size and hardness of the abdomen. An accumulation of fat covering the belly has sometimes led a lady to suspect that she is pregnant, but the soft and doughy feeling of the fat is very different to the hardness, solidity and resistance of the pressure of pregnancy. Increased size and hardness of the belly is very characteristic of pregnancy. When a lady is not pregnant the belly is soft and flaccid; when she is pregnant, and after she has quickened, the belly over the region of the womb is hard and resisting.

The sixth symptom is pouting or protrusion of the navel. This symptom does not occur until some time after a lady has quickened; indeed, for the first two months of pregnancy the navel is drawn in and depressed. As the pregnancy advances, the navel gradually comes

more forward. The navel, according to the progress of the pregnancy, is constantly emerging till it comes to an even surface with the integuments of the abdomen, and to this circumstance much regard is to be paid in cases of doubtful pregnancy.

Loss of Flesh.

The seventh symptom is emaciation; the face, especially the nose, pinched and pointed, features altered, a pretty woman becoming, for a time, plain; these unbecoming appearances generally occur in the early months—the face, as the pregnancy advances, gradually resuming its pristine comeliness. Emaciation, of course, may, and does occur from other causes, besides those of pregnancy; but still, if there be emaciation, together with other signs of pregnancy, it tends to confirm the patient in her convictions that she is *enceinte*.

Many a plump lady, then, tells of her pregnancy by her sudden emaciation. There is one comfort, as soon as the pregnancy is over, if not before, the body usually regains the former plumpness.

The eighth symptom is irritability of the bladder, which is sometimes one of the early signs of pregnancy, as it is, likewise, frequently one of the early symptoms of labor. The irritability of the bladder, in early pregnancy, is oftentimes very distressing and very painful—the patient being disturbed from her sleep several times in the night to make water, making generally but a few drops at a time. This symptom usually leaves her as soon as she has quickened, to return again—but, in this latter instance, usually without pain—just before the commencement of labor.

A Simple Remedy.

There is very little to be done, in such cases, in the way of relief. One of the best remedies is, a small teaspoonful of sweet spirits of nitre in a wineglassful of water, taken at bed-time. Drinking plentifully, as a beverage, of barley water with best gum arabic dissolved in it—half an ounce of gum to every pint of barley water—the gum arabic being dissolved in the barley water by putting them both in

a saucepan over the fire, stirring the while until the gum be dissolved. This beverage may be sweetened according to taste, either with sugar-candy or with lump sugar.

Sleepiness, heartburn, increased flow of saliva (amounting, in some cases, even to salivation), toothache, loss of appetite, longings, excitability of mind, liver- or sulphur-colored patches on the skin, and likes and dislikes in eating—either the one or the other of these symptoms frequently accompany pregnancy; but, as they might arise from other causes, they are not to be relied on further than this—that if they attend the more certain signs of pregnancy, such as cessation of being “regular,” morning sickness, pains and enlargement of and milk in the breasts, the gradually darkening brown areola or mark around the nipple, etc., they will then make assurance doubly sure, and a lady may know for certain that she is pregnant.

Sleepiness often accompanies pregnancy—the patient being able to sleep in season and out of season—often falling asleep while in company, so that she can scarcely keep her eyes open.

A Disagreeable Ailment.

Some pregnant ladies are much afflicted with heartburn, for affliction it assuredly is; but heartburn, as a rule, although very disagreeable, is rather a sign that the patient will go her time. Moreover, heartburn is very amenable to treatment, and is generally much relieved by ammonia and soda.

Increased flow of saliva is sometimes a symptom of pregnancy, amounting, in rare cases, to regular salivation; the patient being, for a time, in a pitiable condition. It lasts usually for days; but, some times, even for weeks, but is not at all dangerous.

Some ladies have, during pregnancy—more especially during the early months—wretched appetites; they regularly loathe their food, and dread the approach of meal-times. While others, on the contrary, eat more heartily during pregnancy than any other period of their lives—they are absolutely ravenous, and can scarcely satisfy their hunger.

The longings of a pregnant lady are sometimes truly absurd; but like almost everything else, "it grows upon what it is fed." They long for sucking pig, for the cracklings of pork, for raw carrots and raw turnips, for raw meat—for anything and for everything that is unwholesome, and that they would at any other time loathe and turn away from in disgust. The best plan of treatment for a pregnant lady, who has longings, to adopt is, not to give way to such longings, unless, indeed, the longings be of a harmless, simple nature, and they then will soon pass harmlessly by.

Mental Excitement.

Excitability of mind is very common in pregnancy, more especially if the patient be delicate; indeed, excitability is a sign of debility, and requires plenty of good nourishment, but few stimulants.

Likes and dislikes in eating are of frequent occurrence in pregnancy—particularly in early pregnancy—more especially if the patient has naturally a weak digestion. If her digestion be weak, she is sure to have a disordered stomach—one following the other in regular sequence. A little appropriate medicine, from a medical man, will rectify the evil and improve the digestion, and thus do away with the likes and dislikes in eating. Liver- or sulphur-colored patches on the skin—principally on the face, neck and throat—are tell-tales of pregnancy, and to an experienced matron, publish the fact that an acquaintance thus marked is *enceinte*.

The Best Clothing.

Some newly-married wives, to hide their pregnancy from their friends and acquaintances, screw themselves up in tight stays and in tight dresses. Now, this is not only foolish, but it is dangerous, and might cause either a miscarriage, or a premature labor, or a cross-birth, or a bearing-down of the womb. A wife, then, more especially during pregnancy, should, to the breasts and to the abdomen,

"Give ample room and verge enough."

A lady who is pregnant ought on no account to wear tight dresses,

as the child should have plenty of room. She ought to be, as *enceinte* signifies, *incincta*, or unbound. Let the clothes be adapted to the gradual development, both of the abdomen and the breasts. She must, whatever she may usually do, wear her stays loose. If there be bones in the stays, let them be removed. Tight lacing is injurious both to the mother and to the child, and frequently causes the former to miscarry ; at another time it has produced a cross-birth ; and sometimes it has so pressed in the nipples as to prevent a proper development of them, so that where a lady has gone her time, she has been unable to suckle her infant, the attempt often causing a gathered breast.

Health Should Govern Dress.

These are great misfortunes, and entail great misery both on the mother and the child (if it has not already killed him), and ought to be a caution and a warning to every lady for the future. But the great thing is for a mother to begin from the beginning, and for her to never allow her daughter to wear stays at all, and then those painful consequences could not possibly ensue. If stays had never been invented, how much misery, deformity, disease, and death might have been averted !

The feet and the legs during pregnancy are very apt to swell and to be painful, and the veins of the legs to be largely distended. The garters ought at such times to be worn slack, as tight garters are highly injurious ; and if the veins be very much distended, it will be necessary for her to wear a properly-adjusted elastic silk stocking, made purposely to fit her foot and leg, and which a medical man will himself procure for her. It is highly necessary that a well-fitting elastic stocking be worn ; otherwise it will do more harm than good. The feet and legs, in such a case, should, during the day, be frequently rested, either on a leg-rest, or on a footstool, or on a sofa.

A warm bath in pregnancy is too relaxing. A tepid bath once a week is beneficial. Sponging the whole of the body every morning with lukewarm water may with safety and advantage be adopted, gradually reducing the temperature of the water until it be used quite

cold. The skin should, with moderately coarse towels, be quickly but thoroughly dried.

The sitz-bath ought every morning to be used. The patient should first sponge herself, and then finish up by sitting for a few seconds, or while in the winter she can count fifty, or while in the summer she can count a hundred in the water. It is better not to be long in it ; it is a slight shock that is required, which, where the sitz-bath agrees, is immediately followed by an agreeable glow of the whole body. If she sit in the water for a long time, she becomes chilled and tired, and is very likely to catch cold.

Precautions in Bathing.

She ought, until she becomes accustomed to the cold, to have a dash of warm water added ; but the sooner she can use quite cold water the better. While sitting in the bath she should throw either a woollen shawl or a small blanket over her shoulders. She will find the greatest comfort and benefit from adopting the above recommendation. Instead of giving, it will prevent cold, and it will be one of the means of warding off a miscarriage, and of keeping her in good health.

A shower-bath in pregnancy gives too great a shock, and might induce a miscarriage. We should not recommend for a lady who is pregnant, sea-bathing ; nevertheless, if she be delicate, and if she be prone to miscarry, change of air to the coast (provided it be not too far away from home), and inhaling the sea-breezes, may brace her, and ward off the tendency. But although sea-bathing be not desirable, sponging the body with sea-water may be of great service to her.

Air and Exercise.

A young wife, in her first pregnancy, usually takes too long walks. This is a common cause of flooding, of miscarriage, and of bearing-down of the womb. As soon, therefore, as a lady has the slightest suspicion that she is *enceinte*, she must be careful in the taking of exercise.

Although long walks are injurious, she ought not to run into an opposite extreme—short, gentle and frequent walks during the whole period of pregnancy cannot be too strongly recommended; indeed, a lady who is *enceinte* ought to live half her time in the open air. Fresh air and exercise prevent many of the unpleasant symptoms attendant on that state; they keep her in health; they tend to open her bowels, and they relieve the sensation of faintness and depression.

Exercise, fresh air and occupation are, then, essentially necessary in pregnancy. If they be neglected, hard and tedious labors are likely to ensue. One, and an important reason of the easy and quick labors and rapid “gettings about” of poor women, is greatly due to the abundance of exercise and of occupation which they are both daily and hourly obliged to get through. Why, many a poor woman thinks but little of a confinement, while a rich one is full of anxiety about the result. Let the rich lady adopt the poor woman’s industrious and abstemious habits, and labor need not then be looked forward to, as it frequently now is, either with dread or with apprehension.

Stooping, lifting of heavy weights and overreaching ought to be carefully avoided. Running, horse-exercise and dancing are likewise dangerous—they frequently induce a miscarriage.

Indolence and Weakness.

Indolence is most injurious in pregnancy. It is impossible for a pregnant lady, who is reclining all day on a sofa or on an easy chair, to be strong; such a habit is most enervating to the mother and weakening to her unborn babe. It is the custom of some ladies, as soon as they become *enceinte*, to fancy themselves and to treat themselves as confirmed invalids, and to lie down, in consequence, the greater part of every day; now this plan, instead of refreshing them, depresses them exceedingly. Now, the only time for them to lie down is occasionally in the day when they are really tired, and when they absolutely need the refreshment of rest—

“The sedentary stretch their lazy length
When Custom bids, but no refreshment find,
For none they need”

A lady who, during the greater part of the day, lolls either on a sofa or on an easy chair, and who seldom walks out, has a much more lingering and painful labor than one who takes moderate and regular open-air exercise, and who attends to her household duties. An active life is, then, the principal reason why the wives of the poor have such quick and easy labors, and such good recoveries; why their babies are so rosy, healthy and strong, notwithstanding the privations and hardships and poverty of the parents.

Advantages of Activity.

Bear in mind, that a lively, active woman has an easier and quicker labor and a finer race of children than one who is lethargic and indolent. Idleness brings misery, anguish and suffering in its train, and particularly affects pregnant ladies. Oh, that these words would have due weight, then this book will not have been written in vain! The hardest work in the world is having nothing to do. "Idle people have the most labor;" this is particularly true in pregnancy; a lady will, when labor actually sets in, find to her cost that idleness has given her the most labor.

Says quaint old Burton: "Idleness is the badge of gentry, the bane of body and mind, the nurse of Naughtiness, the stepmother of Discipline, the chief author of all Mischief, one of the seven deadly sins, the cushion upon which the Devil chiefly reposes, and a great cause, not only of Melancholy, but of many other diseases, for the mind is naturally active, and if it be not occupied about some honest business, it rushes into Mischief or sinks into Melancholy."

A lady sometimes looks upon pregnancy more as a disease than as a natural process; hence, she treats herself as though she were a regular invalid, and, unfortunately, she too often makes herself really one by improper and by foolish indulgences.

Ventilation--Drainage.

Let a lady look well to the ventilation of her house; let her take care that every chimney be unstopped, and during the daytime that

every window in every unoccupied room be thrown open. Where there is a skylight at the top of the house it is well to have it made to open and to shut, so that in the daytime it may, winter and summer, be always open ; and in the summer-time it may, day and night, be left unclosed. Nothing so thoroughly ventilates and purifies a house as an open skylight.

If a lady did but know the importance—the vital importance—of ventilation, she would see that the above directions were carried out to the very letter. Our firm belief is, that if more attention were paid to ventilation—to thorough ventilation—child-bed fever would be an almost unknown disease. The cooping-up system is abominable ; it engenders all manner of infectious and loathsome diseases, and not only engenders them, but feeds them, and thus keeps them alive.

There is nothing wonderful in all this, if we consider, but for one moment, the exhalations from the lungs are poisonous ; that is to say, the lungs give off carbonic acid gas (a deadly poison), which, if it be not allowed to escape out of the room, must over and over again be breathed. That, if the perspiration of the body (which in twenty-four hours amounts to two or three pounds) be not permitted to escape out of the apartment, it must become fetid—repugnant to the nose, sickening to the stomach, and injurious to the health. How often the nose is a sentinel, and warns its owner of approaching danger.

Use of Disinfectants.

Verily the nose is a sentinel. The Almighty has sent bad smells for our benefit to warn us of our danger. If it were not for an unpleasant smell, we should be constantly running into destruction. How often we hear of an ignorant person using disinfectants and fumigations to deprive drains and other horrid places of their odors ; as though, if the place could be robbed of its smell, it could be robbed of its danger. Strange infatuation. No ; the frequent flushings of drains, the removal of nuisances, cleanliness, a good scrubbing of soap and water, sunshine, and the air and winds of heaven, are the best disinfectants in the world

A celebrated and eccentric lecturer on surgery—Abernethy—in addressing his class, made the following quaint and sensible remark :
‘Fumigations, gentlemen, are of essential importance ; they make so abominable a stink, that they compel you to open the windows and admit fresh air.’ Truly the nose of a man is a sentinel,

“And the fœtid vapors of the fen
Warn him to fly from danger.”

The right way to do away with the danger is to remove the cause, and the effect will cease ; flushing a sewer is far more efficacious than disinfecting one. Soap and water and the scrubbing brush, and sunshine and thorough ventilation, each and all are far more beneficial than either permanganate of potash, or chloride of zinc, or chloride of lime. People, now-a-days, think too much of disinfectants, and too little of removal of causes ; they think too much of artificial, and too little of natural means. It is a sad mistake to lean so much on, and to trust so much to man’s inventions.

Benefits of Pain.

Not only is the nose a sentinel, but pain is a sentinel. The sense of pain is necessary to our very existence ; we should, if it were not for pain, be constantly falling into many and great and grievous dangers ; we should, if it were not for pain, be running into the fire and be burned ; we should, if it were not for pain, swallow hot fluids and be scalded ; we should, if it were not for pain, be constantly letting things “go the wrong way,” and be suffocated ; we should, if it were not for pain, allow foreign substances to enter the eye and be blinded ; we should, if it were not for pain, be lulled to a false security, and allow disease to go on unchecked and untended until we had permitted the time to pass by when remedies were of little or no avail.

Pain is a sentinel, and guards us from danger ; pain is like a true friend, who sometimes gives a little pain to save a greater pain ; pain sometimes resembles the surgeon’s knife—it gives pain to cure pain ; sense of pain is a blessed provision of nature, and is designed for the protection, preservation and prolongation of life.

If a lady, while on an errand of mercy, should, in the morning, go into a poor person's bedroom after he, she or they (for oftentimes the room is crowded to suffocation) have, during the night, been sleeping, and where a breath of air is not allowed to enter—the chimney and every crevice having been stopped up—and where too much attention has not been paid to personal cleanliness, she will experience a faintness, an oppression, a sickness, a headache, a terrible foetid smell: indeed, she is in a poisoned chamber. It is an odor *sui generis*, which must be smelt to be remembered, and will, then, never be forgotten. "The rankest compound of villainous smell that ever offended nostril."

Exhalations from the Body.

Pity the poor who live in such sties—not fit for pigs. For pigs' sties are ventilated. But take warning, ye well-to-do in the world, and look well to the ventilation, or beware of the consequences. "If," says an able writer on fever in the last century, "any person will take the trouble to stand in the sun, and look at his own shadow on a whole plastered wall, he will easily perceive that his whole body is a smoking dunghill, with a vapor exhaling from every part of it. This vapor is subtle, acrid and offensive to the smell; if retained in the body it becomes morbid, but if re-absorbed, highly deleterious. If a number of persons, therefore, are long confined in any close place, not properly ventilated, so as to inspire and swallow with their spittle the vapors of each other, they must soon feel its bad effects."

Contagious diseases are bred and fed in badly-ventilated houses. Ill-ventilated houses are hotbeds of diseases. Contagion is subtle, quick, invisible and inscrutable—tremendous in its effects; it darts its poison like a rattlesnake, and instantly the body is infected, and the strong giant suddenly becomes as helpless as the feeble infant:

"Even so quickly may one catch the plague."

Not only should a lady look well to the ventilation of her house, but either she or her husband ought to ascertain that the drains are in good and perfect order, and that the privies are frequently emptied of their contents, and that neither drain-fluids nor privy-fluid communi-

cates, in any way whatever, with the drinking-water supply. If it, unfortunately, should do so, the well is poisoned, breeding pestilence and filling our graveyards with corpses.

Sure Sources of Disease.

Bad drainage and overflowing privies are fruitful sources of child-bed fever, of gastric fever, of scarlatina, of diphtheria, of cholera and of a host of other infectious and contagious and dangerous diseases. It is an abominable practice to allow dirt to fester near human habitations; more especially as dirt when mixed with earth is really so valuable in fertilizing the soil.

Drain-poison is so instantaneous in its effects, so subtle in its operations, so deadly in its consequences, so untiring in its labors—working both day and night—that it may well be said to be “the pestilence that walketh in darkness,” and “the sickness that destroyeth in the noon-day.”

The Water Must Be Absolutely Pure.

A lady ought to look well to the purity of her pump-water, and to ascertain that no drain either enters or percolates, or contaminates in any way whatever, the spring; if it should do so, disease, such as either cholera, or diarrhœa, or dysentery, or diphtheria, or scarlet fever, or gastric fever, will, one or the other, as a matter of course, ensue. If there be the slightest danger or risk of drain contamination, whenever it be practicable, let the drain be taken up and be examined, and let the defect be carefully rectified. When it be impracticable to have the drain taken up and examined, then let the pump-water, before drinking it, be always previously boiled. The boiling of the water, as experience teaches, has the power either of destroying or of making innocuous the specific organic fæcal life poison, which propagates in drain contamination the diseases above enumerated.

The water from our American tube-well is far superior to water from the old pump-well; the water from the former is always pure, while from the latter it is usually most impure—it is oftentimes little

better than water from a cesspool, it being contaminated either with drainage impurities, with faecal matter, or with water from land-springs. Have nothing to do with the antiquated pump, which is both a nuisance and a danger; indeed, the pump-water being generally impure, is one of the most frequent causes of diphtheria, of scarlet fever, of dysentery, of cholera, and gastric fever. The pump, fifty years hence, will be, what stage-coaches are now, things of the past—a curiosity.

Necessity of Occasional Rest.

A lady who is pregnant ought, for half an hour each time, to lie one or two hours every day on the sofa. This, if there be either a bearing-down of the womb, or if there be a predisposition to a miscarriage, will be particularly necessary. We should recommend this plan to be adopted throughout the whole period of her pregnancy; in the early months to prevent a miscarriage, and, in the latter months, on account of the increased weight and size of the womb.

The modern sofas are most uncomfortable to lie upon; they are not made for comfort, but, like many other things in this world, for show; one of the good, old-fashioned, roomy sofas, then, should be selected for the purpose, in order that the back may be properly and thoroughly rested.

There is, occasionally, during the latter months, a difficulty in lying down, the patient feeling as though every time she makes the attempt she should be suffocated. When such be the case, she ought to rest herself upon the sofa, and be propped up with cushions, as we consider rest at different periods of the day necessary and beneficial. If there be any difficulty in lying down at night, a bed-rest, well covered with pillows, will be found a great comfort.

Look Well to Your Diet.

An abstemious diet, during the early period of pregnancy, is essential, as the habit of body at that time is usually feverish and inflammatory. We should, therefore, recommend abstinence from beer, porter and spirits. Let us in this place urge a lady, during her preg-

nancy, not to touch spirits, such as either brandy or gin; they will only inflame her blood and will poison and make puny her unborn babe; they will only give her false spirits, and will depress her in an increased ratio as soon as the effects of the brandy or of the gin have passed away. She ought to eat meat only but once a day. Rich soups and highly-seasoned stews and dishes are injurious.

A lady who is *enceinte* may depend upon it that the less stimulants she takes at these times the better it will be both for herself and for her infant; the more kind will be her labor and her "getting about," and the more vigorous and healthy will be her child.

III Effects of Overloading the Stomach.

It is a mistaken notion that she requires more nourishment during early pregnancy than at any other time; she, if anything, requires less. It has often been asserted that a lady who is pregnant ought to eat very heartily, as she has two to provide for. When it is taken into account that during pregnancy she "ceases to be unwell," and therefore that there is no drain on that score; and when it is also considered how small the ovum containing the embryo is, not being larger for the first two or three months than a hen's egg, it will be seen how futile is the assertion. A wife, therefore, in early pregnancy, does not require more than at another time; if anything, she requires less. Again, during pregnancy, especially in the early stage, she is more or less sick, feverish, and irritable, and a superabundance of food would only add fuel to the fire, and would increase her sickness, fever and irritability. Moreover, she frequently suffers from heartburn and from indigestion.

Can anything be more absurd, when such is the case, than to overload a stomach already loaded with food it is not able to digest? No, let nature in this, as in everything else, be her guide, and she will not then go far wrong. When she is further advanced in her pregnancy—that is to say, when she has quickened—her appetite generally improves, and she is much better in health than she was before; indeed, after she has quickened, she is frequently in better health

than she ever has been. The appetite is now increased. Nature points out that she requires more nourishment than she did at first; for this reason, the fœtus is now rapidly growing in size, and consequently requires more support from the mother.

Let the food, therefore, of a pregnant woman be now increased in quantity, but let it be both light and nourishing. Occasionally, at this time, she has taken a dislike to meat; if she have she ought not to be forced to eat it, but should have, instead, poultry, game, fish, chicken-broth, beef-tea, new milk, farinaceous food, such as rice, sago, batter-puddings, and, above all, if she have a craving for it, good sound, ripe fruit.

Roasted apples, ripe pears, raspberries, strawberries, grapes, tamarinds, figs, Muscatel raisins, stewed rhubarb, stewed or baked pears, stewed prunes, the insides of ripe gooseberries, and the juice of oranges are, during pregnancy, particularly beneficial; they both quench the thirst and tend to open the bowels.

Avoid Highly-seasoned Dishes.

The food of a pregnant woman cannot be too plain; highly-seasoned dishes ought therefore to be avoided. Although the food be plain, it must be frequently varied. She should ring the changes upon butcher's meat, poultry, game, and fish. It is a mistaken notion, that people ought to eat the same food over and over again, one day as another. The stomach requires variety, or disease, as a matter of course, will ensue.

Light puddings, such as either rice, or batter, or suet pudding, or fruit puddings, provided the paste be plain, may be taken with advantage. Rich pastry is highly objectionable. Indeed, it is such, as a rule, to persons of strong digestion.

If she be plethoric, abstinence is still more necessary, or she might have a tedious labor, or might suffer severely. The old-fashioned treatment was to bleed a pregnant patient if she were of a full habit of body. A more absurd plan could not be adopted! Bleeding would, by causing more blood to be made, only increase the mischief; but

certainly it would be blood of an inferior quality, watery and poor. It might in such case be truly said, that

“The wine of life is drawn.”

The best way to diminish the quantity of blood is to moderate the amount of food—to lessen the supplies ; but not, on any account, to leave off eating of meat for dinner ; she will, if she do, suffer both at and after her confinement.

A Costly Mistake.

We have known some ladies, during the few last months of their pregnancies, to abstain from meat altogether, believing thereby that they will insure easier confinements and better “gettings about.” Now, this is altogether a mistake ; they are much more likely, from the low diet, to have more tedious and harder labors, and worse “gettings about.” Not only so, but if they are kept, during the last months of their pregnancies, on too low a diet, they are likely to make wretched nurses for their children, both in quantity and in the quality of their milk. No ; let a lady who is *enceinte* adopt the best hygienic means, which we have, in these pages, endeavored to lay down, and she will then be prepared both for her coming labor and for her subsequent suckling.

A pregnant lady, then, should endeavor by every means in her power to make herself healthy ; this is the best way to prepare for labor and for suckling. We are not advocating luxury, ease, and enervation—nothing of the kind, for we abhor luxurious living ; but, on the contrary, we are recommending simplicity of living, occupation, fresh air and exercise, and plain, wholesome, nourishing diet ; all of which may be considered as nature’s medicine—and splendid physic, too, it is.

The Sleeping Apartment.

It is a mistaken practice for a pregnant woman or for any one else to sleep with closely-drawn curtains. Pure air and a frequent change of air are quite as necessary—if not more so—during the night as during the day, and how can it be pure, and how can it be changed,

if curtains be closely drawn around the bed? Impossible. The roof of the bedstead ought not to be covered with furniture; it should be open to the ceiling, in order to prevent any obstruction to a free circulation of air.

The bed must not be loaded with clothes, more especially with a thick coverlet. If the weather be cold, let an extra blanket be put on the bed, as the perspiration can permeate through a blanket when it cannot through a thick coverlet. The knitted, for the summer, are the best kind of coverlets, as they allow the perspiration from the body to escape, and the eider-down, for the winter, as they are light and warm and ventilating.

It is a marvel how some people, with four or five blankets and with thick coverlet on bed, can sleep at all; their skins and lungs are smothered up, and are not allowed to breathe, for the skin is as much a breathing apparatus as are the lungs themselves. It is a sad mistake, and fraught with serious consequences.

The bedroom, at night, should be dark; hence the importance of either shutters or Venetian blinds or dark blinds impervious to light, or thick curtains to the windows. The chamber, too, should be as far removed from noise as possible—as noise is an enemy to sleep. The room, then, should, as the poet beautifully expresses it, be “deaf to noise and blind to light.”

Remedies for Restlessness.

A lady who is pregnant is sometimes restless at night—she feels oppressed and hot. The best remedies are: (1) Scant clothing on the bed; (2) The lower sash of the window, during the summer months, to be left open to the extent of six or eight inches, and during the winter months, to the extent of two or three inches, provided the room be large, the bed be neither near nor under the window, and the weather be not intensely cold. If any or all of these latter circumstances occur, then (3) the window to be closed and the door to be left ajar (the landing or the skylight window at the top of the house being left open all night, and the door being secured from

intrusion by means of a door-chain); (4) Attention to be paid, if the bowels be costive, but not otherwise, to a gentle action of the bowels by a mild aperient; (5) An abstemious diet, avoiding stimulant of all kinds; (6) Gentle walking exercise; (7) Sponging the body every morning, in the winter, with tepid water, and in the summer with cold water; (8) Cooling fruits in the summer are, in such a case, very grateful and refreshing.

A pregnant woman sometimes experiences an inability to lie down, the attempt occasionally producing a feeling of suffocation and of faintness. She ought, under such circumstances, to lie on a bed-rest, which must, by means of pillows, be made comfortable; and she should take every night at bedtime a teaspoonful of sal-volatile in a wineglassful of water.

Must Retire Early.

Pains at night, during the latter end of the time, are usually frequent, so as to make an inexperienced lady fancy that her labor is commencing. Little need be done, for unless the pains be violent, nature ought not to be interfered with. If they be violent, application should be made to a physician.

A pregnant lady must retire early to rest. She ought to be in bed every night by ten o'clock, and should make a point of being up in good time in the morning, that she may have a thorough ablution, a stroll in the garden, and an early breakfast; and that she may afterwards take a short walk either in the country or in the grounds while the air is pure and invigorating. But how often, more especially when a lady is first married, is an opposite plan adopted. The importance of bringing a healthy child into the world, if not for her own and her husband's sake, should induce a wife to attend to the above remarks.

Although some ladies, during pregnancy, are very restless, others are very sleepy, so that they can scarcely, even in the day, keep their eyes open. Fresh air, exercise and occupation are the best remedies for keeping them awake, and the best remedies for many other complaints besides.

CHAPTER XI.

THE HUMAN OVUM, OR EGG.

Birth of Plants—How Animalcules are Formed—Amazing Number of Eggs in Fishes—Spontaneous Generation a Myth—Ovaries of the Human Female—Seminal Fluid of the Male—Reception of the Ovum by the Uterus—The Germinal Centre—Anatomy of the Testes—Evolution of Spermatozoa—Result of Impregnation—"The Turn of Life"—Remarkable Changes at Puberty—Woman's Organization Finer than that of Man—Peculiarities and Mission of Woman.

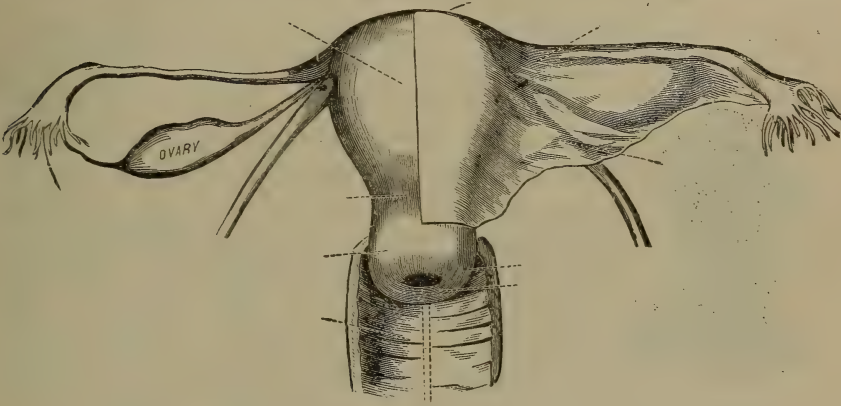
REPRODUCTION in animals is curiously analagous to the same process in the vegetable kingdom. There are the same varieties in the modes of multiplication and generation. The process of generation in some of the lower animal organizations is exactly like the throwing out of new bulbs in plants. The polypes throw out buds which in a little while grow mouths, fringed with cilia or tentacles, while they are still holding by stalks and drawing part of their nourishment from their parents. When enough matured to get their own living they drop off, swim away, and shift for themselves. This is gemmation.

Fission is a common mode of propagation or multiplication among the infusoria. An animalcule is seen to contract in a ring around its centre; the fissure deepens and it divides into two distinct beings, which also divide, and so on, multiplying with surprising rapidity. It has been estimated that one of these animalcules could produce by these successive divisions in eight weeks a progeny of two hundred and sixty-eight millions.

This reproductive power is, however, almost rivalled by some fishes and insects. The carp lays seven hundred thousand eggs in a season, and lives two hundred years. The possible progeny of a pair of these fishes is almost beyond computation. The cod is said to produce from four to nine millions of eggs. The female termite lays sixty thousand eggs a day for a considerable period.

Some of the lower animals may be multiplied artificially like vegetables. Thus, if some species of the polypus are cut in pieces, each piece produces the missing parts so as to become a perfect animal, as cuttings of a geranium produce geraniums.

But perhaps the most curious mode of multiplication takes place in some sea-worms. They divide into sections by constricting rings, and each section forms for itself head, eyes, etc., at one extremity, and tail at the other, while yet the sections are united; but when all is ready each section sets up its own independent life, and then produces in its



STRUCTURE OF THE WOMB AND ITS APPENDAGES.

body germs of similar worms, by the more usual process, just as some vegetables propagate by seeds, as well as by bulbs or tubers.

Seeds in Vegetables and Eggs in Animals.

These modes of multiplication—fission, gemmation, etc.—such as we have described are, however, not the rule in nature, but the exception, or variation—a ruder method of the extension of life, which is confined to the lower forms of animal existence. As vegetables are generally produced from seeds, animals are generally produced from eggs. There is no good reason, so far as we now know, to believe that there is any spontaneous generation of vegetables or animals—that is, that

any vegetable or animal ever of itself is formed from matter without a spore or germ which has been produced by a similar organization.

At some time, and in some way, every kind of living form had its beginning; but no one has seen such beginning. Creation is a mystery. Every living thing upon the earth has at sometime, somewhere, and somehow been created; but we do not know the when, the where, or the how. Human science reveals to us something of the phenomena of nature—nothing of its causes or beginnings.

The Ovaries of the Female.

As in vegetables, we find the beginning of new organization in the formation by the generative organs of a plant, which are in most cases portions of its flower, of a germ cell in the ovary or female organ, and of a pollen cell by the anther or male organ, which unite to form the living germ, which develops into the perfect plant; so in all the higher forms of animal life, in oysters, fishes, insects, birds, beasts and men, we have germs or eggs formed in the ovaries of the female, which at a certain stage of development are impregnated, or fecundated by union with a similar germ, produced in a somewhat similar organ of the male—the male



UTERUS OF AN
INFANT

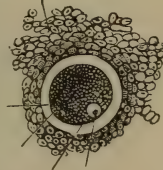
and female elements uniting to produce the perfect being. The unfertilized, unimpregnated or unfecundated ovum or egg quickly perishes. The one to which has been added the masculine element is from that moment endowed with life, and, with favoring conditions, develops with a wonderful activity.

Fishes produce a vast number of eggs, as may be seen in the hard roe of herring, which, when they have arrived at a certain stage, are spawned—that is, expelled from the body in places which the fish instinctively find for that purpose. Salmon come hundreds, perhaps thousands of miles through the deep ocean to lay their eggs in the shallow fresh water streams in which they themselves were hatched.

The male herring and salmon produce, in organs not unlike the ovaries, myriads of sperm cells, destined to fertilize the germ cells of the female. This is the soft roe—a drain-like substance, chiefly composed of these cells. The male fishes attend the females, and fill the water where their eggs are laid with what seems a milky fluid. The two elements come into contact, perhaps by a mutual attraction, fecundation takes place, and, in due time, swarms of young fishes are the result.

With insects and birds, the process is a little varied. The eggs are formed, as with the fishes, in the ovaries of the females, but at a certain stage they are fecundated before leaving the body, by the male element being conveyed to them by a process similar to that which takes place in flowers. The seminal fluid of the male, corresponding to the pollen of the plant, is conveyed to the germ in the ovary by means specially adapted to that purpose.

After the egg has grown to its full size—in insects covered with a tough membrane, and in birds with a hard shell—it is placed in some proper nest, and hatched either by solar heat or the warmth of one or both of the parents. Animals so born are called oviparous—born from eggs. A few fishes, as the shark and skate, lay fecundated eggs like birds, with curiously formed horny shells, and cables for mooring.



OVUM AND ITS
VITAL CENTRE

The Ovum Passes into the Uterus.

With the mammalia, the higher orders of animals, including the human species, there is still another process. The egg or germ is formed in the ovary of the female. When fully formed it bursts from its containing membranes with a certain degree of excitement of the generative system, and passes through tubes provided for that purpose into a receptacle called the uterus, or womb.

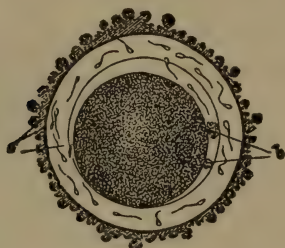
If here met by the seminal fluid, or fertilizing masculine element, fecundation takes place, a perfect germ is produced, foetal life begins,

and the animal is, so to speak, hatched in the womb of its mother, nourished by her blood, and grows until it is ready to come into the world and live its independent life. Animals so produced are called viviparous, or born alive.

The young of the kangaroo, and other marsupials, are born in a very immature condition, and carried in a kind of bag formed upon the abdomen of the mother within which are the teats from which the little ones draw their nourishment.

The Whole Structure Contained in the Egg.

The eggs of birds, from those of the humming-bird, like peas, to the great eggs of the ostrich, which will furnish a dinner for six men,



THE OVUM ON ARRIVING IN THE
FALLOPIAN TUBE.



THE OVUM SLIGHTLY ADVANCED
IN THE TUBE.

contain not only the germ, which is very minute, but its supply of food—the materials from which its body, bones, feathers, etc., are formed during the process of incubation or hatching. The white of the egg, almost pure albumen, is not essential to it, but useful as food. The eggs of many animals are without it. The yolk, consisting of albumen and oil, contains the matter first taken into the organization.

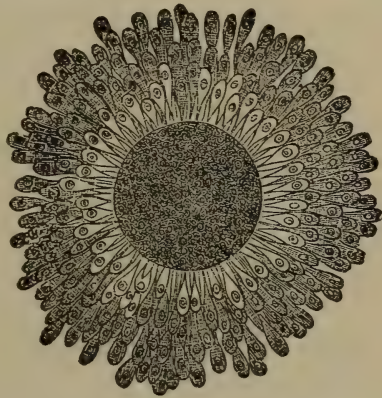
The germinal spot, a point of matter, is the real germ, and can only be seen under the microscope. The eggs of viviparous animals are of extreme minuteness. That of a dog is the 1-130th of an inch in diameter including yolk, germinal vesicle, and germinal spot. The human ovum is still smaller, about 1-140th of an inch in diameter; and in the circumference of that small diameter lies, what a world of

character and power—lies all that shall distinguish the highest example of human civilization and culture from the lowest savage—poet, philosopher, hero, idiot ruffian lunatic—all the possibilities and potentialities of humanity.

Wonders of Generation.

At a certain period in the life of a plant, in organs prepared for that important function, are formed the germs of new plants. The germ producing organ, frond or flower, does its work and dies. The tree lives on, but each individual bud, producing flower and seed or fruit, perishes. This is the law of vegetative generation.

Such is also, to a great extent, the law of insect life. The insect produces one crop of germs; they are fertilized by one conjunction of the sexes; the eggs are deposited, sometimes in immense numbers, where they can be hatched in safety, and where its proper food can be found for the new being in the earliest stage of its development; and then, as if the whole purpose of life had been



RIPE OVUM SURROUNDED BY CELLS

accomplished, the male and female alike perish. In some cases the male insect sacrifices his life in the very act of fecundation.

In the higher orders of animals, fishes, reptiles, birds and mammals, the production of germs goes on year after year in varying periods. The guinea-pig begins to breed at two months old, and the higher the type, the later is the period of germ formation, until in man the period of puberty or the beginning of the generative function is at about fifteen years, varying from twelve to eighteen, but the natural powers are scarcely at their full strength and fitness until some years later.

The power of reproduction as to numbers seems to be in the

inverse ratio as to development. The lowest forms of life multiply with amazing rapidity; some insects produce myriads, fishes spawn eggs by millions, hens lay an egg a day for months together, rabbits, cats, dogs breed every few months, and have at each birth a numerous progeny, while the higher orders of mammalia produce their young but once a year, and have but one, or, in rare cases, two at a birth.

When the human germ has been slowly formed in the ovary, and perfected up to the period when it bursts forth in its first birth, fit for impregnation, it is nine months in arriving at the development which fits it for birth and independent existence. For twelve months more it draws its supply of nutriment from the mother, and two years may be considered the normal interval from birth to birth. It should never



OVUM STILL MORE ADVANCED
IN THE TUBE.



THE OVUM FROM THE LOWER
END OF FALLOPIAN TUBE.

be less with a proper regard to the health of the mother, and the proper development of her children, and the practice of shortening this period by hiring wet nurses is a violation of nature which is avenged on parents and their offspring.

What the Ovaries are For.

The mother is exhausted by too frequent child-bearing, and children are deprived of the love, the magnetism, the life of the mother, which comes to them from her blood transformed into the most delicious food for them, and the nervous and spiritual food which no money can buy, and no one but the mother can give.

The human germ cell or egg is formed from the blood in a gland-like organ. about an inch and a half long, oval shaped, placed in the

lower part of the abdomen in the groin, and on each side of the uterus, or womb. In each ovary, from the period of puberty, in a healthy female, there is a constant formation and growth of germs, or ova, which goes on for thirty or forty years.

When the first perfect germs have ripened, one or more, they come to the surface of the ovary, burst from their sacs, sometimes with considerable force, attended by a nervous excitement, a congestion of the bloodvessels of ovaries and womb, and when impregnation does not take place the freed germ passes into the mouth of the Fallopian tube, through which it passes into the uterus, from which it passes, with the menstrual evacuation, a secretion from the mucous surfaces of these organs, reddened more or less by some exudation from the congested vessels through the mouth of the womb into the vagina.

Constant Production of Germs.

This menstrual or monthly flow marking the production of germs, and their expulsion when not fecundated by the presence of the masculine element goes on monthly from its commencement at

the age of puberty, normally at fourteen to sixteen years of age, to the period of the cessation of the menses or "turn of life," from forty-five to sixty, when no more germs are formed, and the capacity for child-bearing ceases.

Corresponding to the ovaries or egg-forming organs of the female are two similar glandular bodies, called the testes, in the male, which produce the spermatic or seminal fluid, corresponding to the pollen of plants, by which the germs are fertilized or fecundated; by means of these germ cells and sperm cells the masculine and feminine elements are brought together so that they can unite in the body and soul, the material and spiritual life of a new being. The human testes are



LAYER OF ALBUMEN IN THE
LOWER PORTION OF THE
TUBE (OBSERVED ONLY IN
THE RABBIT).

formed within the body near the kidneys, but some time before birth they descend, pass out of the abdomen by the inguinal canal, and take their place in an external sac prepared for them, called the scrotum.

These testes or testicles show the importance of their function by a wonderfully elaborate organization, of which some idea is given in the accompanying figure. The oval body is composed of a vast number of lobules, formed of very fine tubes closely folded, and everywhere in contact with bloodvessels and nerves. There are in each testicle about four hundred and fifty of these lobules.



OVUM OF A RABBIT, SHOWING THE LIFE-GERMS OF THE MALE.

The matter secreted by them passes through a vast number of tubes, 1-170th of an inch in diameter, ending in a convoluted tubular structure, measuring twenty-one feet in length, ending in a single tube, which carries the masculine generative matter to the urethra, whence, in the sexual congress, it is ejected into the vagina, enters the mouth of the womb, and either there or in the Fallopian tubes meets and impregnates the germ coming from the ovaries.

The seminal fluid is as complex and vital a substance as we should expect to have formed by so remarkable an apparatus. Floating in a liquid are minute cells, in which other cells or corpuscles may be discovered, and in these are formed bundles of spermatozoa, curiously-shaped living cells, 1-600 to 1-800 of a line in length, each one of which is furnished with a single cilium or long, slender tail, which propels it with a constant vibrative motion, as if it were a living animalcule. This spermatozoon is the true agent of fertilization, corresponding to the pollen grain of the flower. It has been discovered in

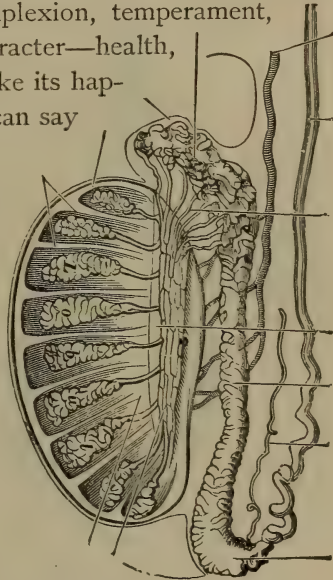
the womb, in the Fallopian tubes, and in contact with the germ just leaving the ovary. Thus the male and female elements are brought together by a natural process.

Source of Form and Features.

There can be little doubt that the cells, furnished with long pro-pellers, carry in them the male principle which gives to the female germ all that makes the child resemble its father, all that it inherits from him of bodily form, features, complexion, temperament, constitution, mental power and moral character—health, disease, idiosyncrasy, that which may make its happiness or misery in this life—and who can say how much also in the life to come?

The germs of human, as of all life, are produced in immense numbers. Even in childhood imperfect germs are formed and discharged, and conception may take place before menstruation begins. Idleness, luxury, the use of rich, highly-seasoned food, condiments and stimulants, and the excitement of the passions, hasten puberty and exaggerate and disorder the corresponding masculine function.

The microscope does not reveal to us what takes place in the act of impregnation or conception, or what change is produced by the contact of the spermatozoon with the ovum. The egg of the maiden hen contains the rudiments of the chick, but it can never be hatched. The warmth that brings life and development to the impregnated egg only hastens the putrefaction of the unimpregnated. The unimpregnated eggs of the frog quickly putrify; but if the male element be soon brought to them they expand into living creatures. In this case the spermatozoa are absorbed into the ovum.

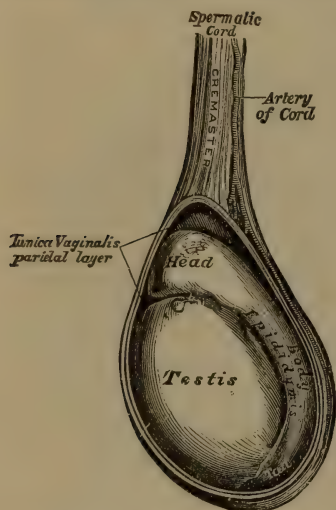


ANATOMY OF THE TESTES.

The blood goes to the testes in long, slender, tortuous arteries presenting an extensive surface for the action of nervous energy, and there is no doubt that the best blood of the body is selected to form the semen, and that it is changed and perfected, first in these arteries and then in the wonderfully fine and convoluted tubes of the testes.

The same arteries that supply blood to the testes in the male, furnish the circulation of the ovaries in the female; and the same nervous centres furnish the nerve energy and directing intelligence;

but what makes the difference in action—forming germ cells in one sex and sperm cells in the other—or what makes sex must probably remain among life's inscrutable mysteries. "Arrest of development" will not account for it, and if it did, what causes arrest of development? "Male and female created He them."



BODY OF TESTIS, SHOWING THE CORDS.

Remarkable Changes at Puberty.

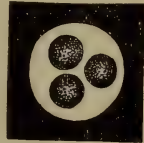
At the age of puberty remarkable changes take place in both sexes. Boys and girls differ, indeed, from their tenderest years. As a rule, boys are more boisterous, girls more gentle; while the girl chooses a doll for her plaything, the boy prefers a drum, a sword, or whip. But at puberty the sexual instincts become stronger, and there is in each a more pronounced development of masculine or feminine appearances and qualities.

In the boy the voice deepens in tone, and the face begins to be covered with a beard. Where the testes have been removed, destroyed or imperfectly developed, the voice remains treble, and the beard light or wanting. There is an enlargement of the throat, the "Adam's apple" corresponding to the full development of the masculine organs. On the other hand, the girl becomes at puberty more

decidedly feminine by the enlargement of the pelvis, the broadening of the hips and the development of the mammary or milk-forming glands in the bosom.

There is no beard to mar the delicacy and feminine beauty of the face, but in both sexes alike, at this period, hair appears upon the pubes. The most striking difference, however, is that already mentioned—the occurrence of the monthly period, marking the ripening and expulsion of germs capable of becoming living men and women.

Woman differs from man in her entire organization—mental emotional, physical. She is more rounded, graceful, soft, sensitive, mobile. Her nervous system is finer and more delicate; she has quicker sensibilities and finer powers of instinct and intuition. Even the bony skeleton of a woman can be distinguished at a glance from that of a man by its longer head and broader pelvis, and generally by its smaller hands and feet.



APPEARANCE OF
THE SEMINAL
GRANULES.

Richerand has, perhaps, exaggerated in saying that “the reproduction of the species is, in woman, the most important object in life—almost the only destination to which nature has called her, and the only duty she has to fulfil in human society;” but Madame de Stael went nearly as far in saying, “Love is but an episode in the life of man; it is the whole history of the life of woman.” Lord Byron has said, almost in the same words:

“Love is of man’s life a thing apart;
’Tis woman’s whole existence.”

We think, however, that there are women who have brains as well as ovaries; and that even the faculties which make women most charming as wives and most excellent as mothers, may have a much broader scope than the production, care and education of their own offspring. Hundreds of women who have never borne children have been more than mothers to great multitudes. In the actual condition of humanity there may be a higher work for many women in saving the children of others, than in having children of their own.

CHAPTER XII.

EMBRYOLOGY, OR DEVELOPMENT OF THE FŒTUS.

Order of Growth—Vital Point of the Egg—Ovum Protected by Membranes—Resemblance to the Egg of the Fowl—Rapid Changes of the Germ—Sizes of the Ovum at Different Periods—Formation of Bone and Muscle—Growth of the Vital Organs—How the Embryo is Nourished—Birth of More than One Child—Second Conception—Period of Gestation—Pregnancy Table—Number of Days to be Reckoned—From What to Date the Count—Mistakes in Reckoning—The Sex of the Child—Proportion of Boys to Girls.

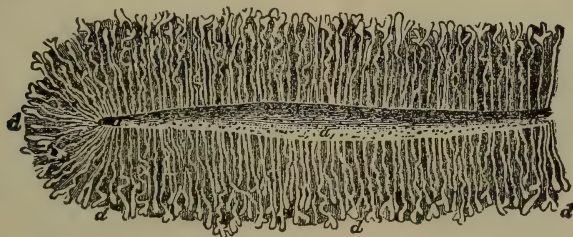
THE ovum once impregnated, nature carries forward its development, as nearly as can be observed, in the following order: The ovum is, from the first, enveloped in two membranes, the outer of which is called the chorion, the inner the amnion. Within lies the principle of life, the germ of the complex being. The ova of all the higher animals are alike at this period, and one cannot be distinguished from another. The amnion or inner membrane secretes upon its inner surface the liquid in which the fœtus is suspended during the whole period of gestation. The chorion or outer covering, on the other hand, acts outwardly, throwing out villi, which, gathered at one point, at a certain period unite with vessels on the inner surface of the uterus, and form the placenta or afterbirth, by which the fœtus is nourished from the blood of the mother.

The central germinal point of the egg and its two coverings form the three parts of a regular cell formation—cell, nucleus and nucleolus.

While the ovum is gradually passing down the Fallopian tube, propelled by the action of its ciliary bodies, a journey which lasts from eight to fourteen days, and in the course of which it is liable to impregnation, the uterus is preparing for its reception. A delicate secretion is poured out over its whole internal surface, which is organized into a membrane called the decidua, so that when the ovum arrives

at the lower end of its Fallopian tube, or, one of the horns of the uterus, this decidua bars its entrance. But, as the ovum is pushed forward, the membrane gives way, and is folded around the ovum, so as to make a double covering. The outer portion is called the decidua vera, or true membrane; the inner, the decidua reflexa, or folded membrane.

We have the ovum now protected by no less than four membranes—two proper to itself, the amnion and chorion, and the two formed by the folded decidua of the uterus.



SECTION OF THE LINING MEMBRANE OF A HUMAN UTERUS AT THE PERIOD OF COMMENCING PREGNANCY,

Showing the arrangement and other peculiarities of the glands *d, d, d*, with their orifices, *a, a, a*, on the internal surface of the organ. Twice the natural size.

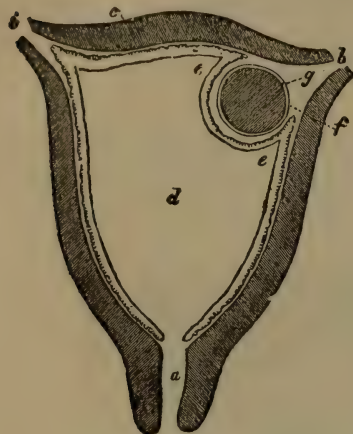
During its passage down the Fallopian tube, the entire ovum is so small that it is with great difficulty it can be found by the closest inspection and the aid of a powerful microscope. When found, however, and subjected to a high magnifying power, it exhibits the same phenomena as it displayed in the incubation of any other egg. There is the yolk, the germinal spot, which gradually expands, and the formation, first of blood, and an external circulation, and then of the rudimental organs; but these changes take place in the uterus.



OVUM 14 DAYS OLD.

The human ovum, at its impregnation, is very small—smaller than the naked eye can distinguish. It is from the 1-120th to the 1-140th of an inch in diameter. But from the moment of fecundation it grows with great energy. The fœtus of one month is an inch long; two months, two inches and a half long; three months, five inches;

five months, six or seven inches; seven months, eleven inches; eight months, fourteen inches; nine months, eighteen inches.

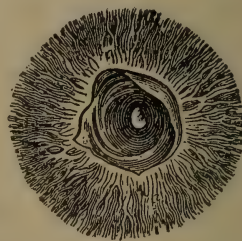


THE UTERUS WHEN THE OVUM IS ENTERING ITS CAVITY.

Ovum, *f*, surrounded by its chorion *g*. *a*, Cervix. *b, b*, Fallopian tubes. *c*, Decidua vera. *d*, Cavity of the uterus. *e*, Decidua reflexa.

The interior structure of the ovum, and the gradual development of the germ, embryo and fœtus, are best explained and illustrated by reference to the larger eggs of fishes and birds. The hen's egg may be taken as a model, and when a hen is setting, or, more humanely, when eggs are being hatched by artificial heat, if one be broken every second or third day, the whole development may be watched with great facility. Nature, it will be seen, has prepared everything, forgotten nothing, and goes on in the formation of a new being, insect, bird or man, with the same wisdom and power that create a universe and endow it with life and motion.

The first step in development in the yolk of the egg must be the vitalization of its matter—further vitalization, we should say, for it is already alive—an organized existence. But the entrance of the masculine element, or its union with the feminine element, whatever they may be, gives a new and very intense life. There is a diffusion, perhaps a rapid spreading growth of fibres of the nerves of organic life. Under their influence cells are formed of matter already fitted for such structures.



OVUM AND EMBRYO FIFTEEN DAYS OLD.

These cells undergo rapid transformations and become the blood, muscle, bone, all the tissues of the young animal. In the egg, these cells are seen to become more opaque in some parts, more trans-

parent in others; they divide and subdivide until the yolk forms what is called a mulberry mass. A germ gathers upon the surface and separates into three layers. In the eggs of fishes, which are so transparent as to be easily watched through the process of development, may be seen an upper or nervous layer, in which are formed the organs of animal life—bones, muscles, brain and nerves, etc.



OVUM AND EMBRYO TWENTY-ONE DAYS OLD.

The lower layer gives origin to the organs of vegetative life—the abdominal viscera, intestines, or alimentary system; the intermediate layer produces the heart, arteries, veins, etc., of the system of circulation.

At a very early period, the general form of the insect or animal is manifested. In insects and crustaceans, the germ is divided into sections. In the germs of vertebrate animals, there are seen the rudiments of a spinal canal which, when formed, is filled with a fluid, from which is formed the brain and spinal cord. The embryo rests upon the yolk and covers it like a cap, vertebrates enclosing it by the edges uniting at the navel.

In fishes, whose embryonic development has been carefully observed by Professor Agassiz, the first lines of the embryo appear on the tenth day—a canal, which becomes a tube—the spine, and an enlargement at one end, the rudimentary head, in which may soon be seen a

division of the brain for the organs of sight, hearing and smell; and soon after the rudiments of eye and ear are apparent. About the seventeenth day the heart is seen as a simple cavity, and, as soon as it is closed, there are regular contractions and a movement of blood corpuscles.

On the thirtieth day there is a regular circulation of blood; the tail gets free, and moves in violent jerks, and the head is soon liberated.

The fish has a brain, an intestine, a pulsating heart, and a limited amount of spontaneous motion; but its form is not clearly defined. By the fortieth day, the shape of the fish is evident, the remains of the yolk hang in a bag to its belly, but it soon becomes absorbed, and then the fish is obliged to seek its own food, having exhausted its embryonic provision.



DIAGRAM REPRESENTING A HUMAN OVUM IN THE SECOND MONTH.

a, 1. Smooth portion of chorion. *a*, 2. Villous portion of chorion. *k*, *k*. Elongated villi beginning to collect into placenta. *b*. Yolk sac, or umbilical vesicle. *c*. Embryo. *f*. Amnion (inner layer). *g*. Allantois. *h*. Outer layer of amnion, coalescing with chorion.

to the embryo chicken what the placenta and blood of the mother are to the human foetus.

In the uterus, the growth of the new being is rapid. Still, in the human subject, up to the seventh day, nothing is visible to the naked eye. On the tenth day, there may be perceived a semi-transparent, grayish flake. On the twelfth there is a vesicle, nearly of the size of a pea, filled with fluid, in the middle of which swims an opaque spot, presenting the first appearance of an embryo, which may be clearly

seen as an oblong or curved body, according as it is viewed, and plainly visible to the naked eye on the fourteenth day. The entire weight of the embryo and its two investing membranes, waters, etc., is now about one grain.

The increase from the first is astonishingly rapid, when we consider its original minuteness. On the twenty-first day the embryo resembles an ant, or a lettuce seed; its length is four or five lines, and it weighs three or four grains.

Many of its parts now begin to show themselves, especially the cartilaginous beginnings of the bones of the spinal column, the heart, brain, etc.

On the thirteenth day the embryo is as large as a horse-fly, and resembles a worm bent together. There are as yet no limbs, and the head is larger than the rest of the body. When stretched out, the embryo is nearly half an inch long.

In the seventh week bone begins to form in the lower jaw and clavicle. Narrow streaks on each side of the vertebral column show the beginning of the ribs; the heart is perfecting its form; the brain enlarged, and the eye and ear growing more perfect, and the limbs sprouting from the body.



OVUM OF SEVEN WEEKS.

now nine lines, or three-fourths of an inch, in length.

In the eighth week the embryo is an inch long, weighs a drachm, and begins to show the division of fingers and toes.



OVUM OF FIVE WEEKS.

The lungs are mere sacs, about one line in length, and the trachea is a delicate thread, but the liver is very large. The anus is still imperforate. In the seventh week are formed the renal capsules and kidneys, and the sexual organs are speedily evolved, but the sex of the fœtus is not determined until some time after. The embryo is

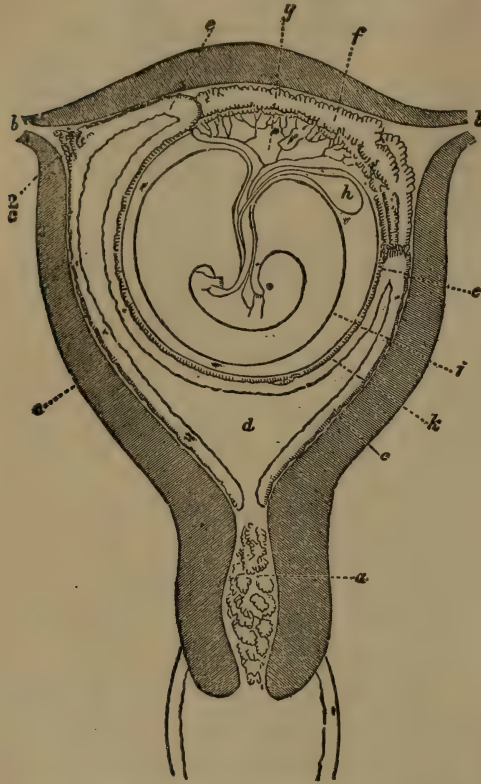
At from sixty to seventy days, the development is rapid, and all the parts are in the course of progressive formation. The eyes enlarge,

the lids are visible, the nose grows prominent, the mouth enlarges, the external ear is formed, the brain is soft and pulpy, the neck well defined, and the heart fully developed.

At three months, the eyelids are distinct, but shut, the lips are drawn together, the organs of generation very prominent in both sexes, both penis and clitoris being remarkably elongated. The heart beats with force, the larger vessels carry red blood, the fingers and toes are well defined, muscles begin to be developed, and the fœtus is four or five inches in length and weighs about two and a half ounces.

At four months, it has greatly expanded in all its parts. The abdominal muscles are formed, and the intestines are no longer visible.

At five months, the lungs have increased, and are even susceptible of a slight dilatation. The skin is now in



SECTION OF THE UTERUS WITH THE OVUM
SOMEWHAT ADVANCED.

a. Muco-gelatinous substance, blocking up os uteri. *b, b.* Fallopian tubes. *c, c.* Decidua vera prolonged, at *c 2*, into Fallopian tube. *d.* Cavity of uterus, almost completely occupied by ovum. *e, e.* Angles at which decidua vera is reflected. *f.* Decidua serotina. *g.* Allantois. *h.* Umbilical vesicle. *i.* Amnion. *k.* Chorion, lined with outer fold of serous tunic.

process of formation, the place of the nails is marked, and meconium gathers in the intestines, showing the action of excretory glands.

Length, eight or ten inches ; weight, fourteen or sixteen ounces. The growth goes on steadily.

At six months, a little down appears upon the head, the areolar tissue is abundant, and fat begins to be deposited. Length, nine to twelve inches ; weight, one pound.

At seven months, every part has increased in volume and perfection ; the bony system is nearly complete. Length, twelve to fourteen inches ; weight, two and a half to three pounds. This is reckoned at the epoch of viability, or the period in which the fœtus, if expelled from the uterus, is capable of independent existence.

From this period up to nine months, there is a mere increase of size and action. The red blood circulates in the capillaries, and the skin performs the function of perspiration. Length, eighteen to twenty-two inches ; weight, from five to eight pounds. There are cases in which an ill-nutured fœtus, at its full period, does not weigh more than two or three pounds ; on the other hand, cases are not rare in which the weight is twelve or fifteen pounds.



OVUM OF EIGHT WEEKS.

During the first weeks of the evolution of the embryo in the uterus, it is nourished, as the young chicken is, by the yolk of the egg. But soon the villi of the chorion gather into a compact mass, and become adherent to some portion of the uterus. There is formed thus a placenta, made of two portions, the maternal side, toward the walls of the uterus, and the fœtal, in which the vessels unite into two arteries and one vein, which, with their envelopments, form the umbilical cord, and communicate with the fœtal heart. By this means, at every pulsation of the heart, blood is sent through the two umbilical arteries to the placenta. Here the vessels branch out into capillaries, which mingle with those of the maternal placenta. communicating with the uterus.

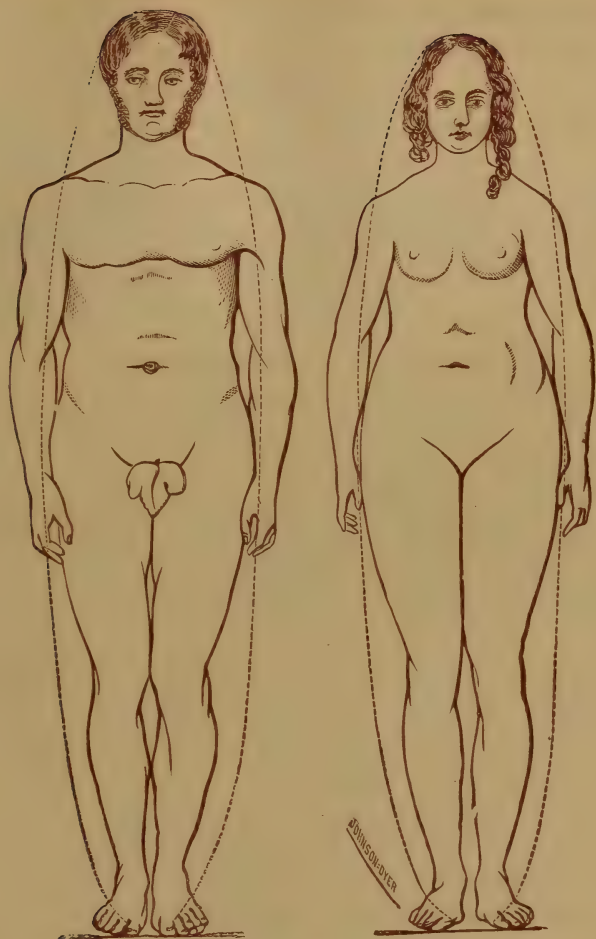
Through the membranous coats of these vessels the blood of the fœtus is nourished and purified. It receives nutritious matter and oxygen ; it gives out carbonic acid. The placenta answers for the fœtus, then, the double purpose of stomach and lungs. The fœtus has its own individual circulation and life, but all its nutriment, from



OVUM OF FIVE MONTHS.

the time this connection is formed until it is severed at birth, comes from the mother.

The regular period of pregnancy in the human female ends with the tenth lunar month or fortieth week. Physiologists have asked why the process necessary to expulsion should be set up at this period. When they have given an intelligible explanation of any vital period.



MALE AND FEMALE FORMS CONTRASTED.

Illustration from Dr. Monfort B.
Allen's The Ladies' Guide to
Health and Beauty, 1903.



icity whatever, they may of this. Time is one of the elements of the universe, whether marked by the beatings of the heart and the movements of respiration or the cycles of the stars, which require millions of millions of years for their completion.

Regularities of action and consequent accuracy of periods are inherent qualities of the intelligent soul and organic life. It is the organic life that presides over the development of the fœtus, and fixes the time for its expulsion. But this organic principle is not a machine. It has the power, for good reasons, to bring on the process of labor earlier, or postpone it to a later period.

Time Required for Gestation.

The normal period of pregnancy is forty weeks or nine months, reckoning from the last menstrual period. But, as some persons have a quicker pulse than others, so in some the vital processes may be more rapid. There are also diseased irregularities which vary the time. Even domestic animals vary weeks in their periods. A gestation, even in a tolerably healthy woman, may be prolonged two or three weeks, and, in disease, still further. On the other hand, it may come on prematurely.

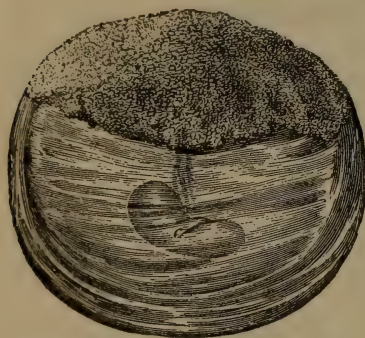
There have been cases where a fœtus of six months has been born and lived, but seven months is generally considered the period of viability. At this time, even where miscarriages are artificially produced, it is said that two children out of three live. A reasonable man may be satisfied of the legitimacy of his child, if he has not been absent from its mother more than seven months at the period of its birth; and if he can count eight months from his first connection to the birth of a full-grown infant, he has no reason to be dissatisfied. Seven months children are said to occur oftenest in a first pregnancy.

There is no probability, we might say, possibility, that when the uterus is occupied by one fœtus, and all avenues to the ovaries are blocked up, another later conception can take place. But there is no reason why a woman may not have twins by two fathers, who have connection with her at nearly the same time; and there are several

cases in which twins have been born, one white and the other mulatto, or mulatto and black, in which the mother avowed that such a state of facts existed. In the same way a litter of pups may be sired by several males, each pup bearing a resemblance to its particular father.

Cases of Twins or More.

This brings up the oft-agitated question, whether, after an ovule has been impregnated and passed down into the cavity of the uterus, another ovule may not be fecundated; so that the products of two conceptions may undergo their respective developments in the uterus, and be delivered at an interval corresponding to that between the con-



OVUM, SHOWING FORMATION OF
AFTERBIRTH.

ceptions. Many physiologists have believed this to be possible, and have given it the name of *superfoetation*. The case, cited from Sir Everard Home, of a young female, who died on the seventh or eighth day after conception, exhibits that the mouth of the womb is at an early period completely obstructed by a plug of impervious mucus, and that the inner surface of the uterus is lined by an efflorescence of plastic matter, the nature of which

is well known to the student of physiology.

When such a change has been effected, it would seem to be impossible for the male sperm to reach the ovary; and, accordingly, the general belief is, that superfoetation is only practicable prior to these changes, and where there is a second vesicle ripe for impregnation. Of this kind of superconception or superfecundation it is probable that twin and triplet cases are often, if not always, examples; one ovule being impregnated at one copulation, and another at the next.

It may happen, too, that although two ova may be fecundated, both embryos may not undergo equal development. One, indeed, may be arrested at an early stage, although still retaining the vital force. In

such a case, the other will generally be found larger than common. A case of the kind occurred in the practice of Professor Hall, of the University of Maryland, and many such are on record. On the 4th of October, 1835, a lady was delivered of a female fœtus, two inches and ten lines in length. This occurred about half-past eight in the morning, and at two o'clock on the following morning she was delivered of a second child, which weighed nine and one-half pounds.

Period of Gestation—"The Count."

The fœtus, when first extruded, gave no evidences of decay, and in color and general character resembled the fœtus of an ordinary abortion. Still, there are many cases recorded in which the interval between the births of the children has been from one hundred and ten to one hundred and seventy days, and neither of the children was in appearance premature, so that the possibility of a second conception, when the uterus already contains an ovum some months old, can scarcely, perhaps, be denied, however improbable it may seem; and, indeed, if the facts be admitted, the deduction seems to be irresistible.

The period of gestation is usually two hundred and eighty days—forty weeks—ten lunar or nine calendar months. It will be well for a lady, in making her "count," to commence her "reckoning" about three days after the last day of her being "unwell." The reason we fix on a woman conceiving a few days after she has "ceased to be unwell" is that she is more apt to conceive soon after menstruation than at any other time.

A Pregnancy Table.

A good plan to make the "reckoning" is as follows: Let forty weeks and a few days from the time specified above, be marked on an almanac, and a lady will seldom be far from her calculation. Suppose, for instance, the last day of her "ceasing to be unwell" was on January 15th, she may expect to be confined on or about October 25th.

The following table, showing the probable commencement, duration and completion of pregnancy, and indicating the date on or

about which day the labor might occur, will, we trust, be found very useful. This table allows three days over the 280 days—making 283 days; that is to say, “the count” of 280 days commences three days after the last day of a lady being “unwell.” The reason we have chosen three days after the last day of menstruation is, a lady is more likely to conceive a few days—say three days—after the last day of her “periods” than at any other time. The reckoning, then, in this table is made to begin from the last day of “her periods”—three days being allowed over for conception—thus making 283 days from the last day of “the periods” until the completion of the pregnancy on or about which day—the 283d day—the labor is likely to occur.

<i>Last Day of “the Periods.”</i>		<i>Labor On or About</i>		<i>Last Day of “the Periods.”</i>		<i>Labor On or About</i>	
Jan.	1	Oct.	11	Jan.	27	Nov.	6
“	2	“	12	“	28	“	7
“	3	“	13	“	29	“	8
“	4	“	14	“	30	“	9
“	5	“	15	“	31	“	10
“	6	“	16	Feb.	1	“	11
“	7	“	17	“	2	“	12
“	8	“	18	“	3	“	13
“	9	“	19	“	4	“	14
“	10	“	20	“	5	“	15
“	11	“	21	“	6	“	16
“	12	“	22	“	7	“	17
“	13	“	23	“	8	“	18
“	14	“	24	“	9	“	19
“	15	“	25	“	10	“	20
“	16	“	26	“	11	“	21
“	17	“	27	“	12	“	22
“	18	“	28	“	13	“	23
“	19	“	29	“	14	“	24
“	20	“	30	“	15	“	25
“	21	“	31	“	16	“	26
“	22	Nov.	1	“	17	“	27
“	23	“	2	“	18	“	28
“	24	“	3	“	19	“	29
“	25	“	4	“	20	“	30
“	26	“	5	“	21	Dec.	1

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<i>Last Day of "the Periods."</i>		<i>Labor On or About</i>		<i>Last Day of "the Periods."</i>		<i>Labor On or About</i>	
Feb.	22	Dec.	2	April	5	Jan.	13
"	23	"	3	"	6	"	14
"	24	"	4	"	7	"	15
"	25	"	5	"	8	"	16
"	26	"	6	"	9	"	17
"	27	"	7	"	10	"	18
"	28	"	8	"	11	"	19
Mar.	1	"	9	"	12	"	20
"	2	"	10	"	13	"	21
"	3	"	11	"	14	"	22
"	4	"	12	"	15	"	23
"	5	"	13	"	16	"	24
"	6	"	14	"	17	"	25
"	7	"	15	"	18	"	26
"	8	"	16	"	19	"	27
"	9	"	17	"	20	"	28
"	10	"	18	"	21	"	29
"	11	"	19	"	22	"	30
"	12	"	20	"	23	"	31
"	13	"	21	"	24	Feb.	1
"	14	"	22	"	25	"	2
"	15	"	23	"	26	"	3
"	16	"	24	"	27	"	4
"	17	"	25	"	28	"	5
"	18	"	26	"	29	"	6
"	19	"	27	"	30	"	7
"	20	"	28	May	1	"	8
"	21	"	29	"	2	"	9
"	22	"	30	"	3	"	10
"	23	"	31	"	4	"	11
"	24	Jan.	1	"	5	"	12
"	25	"	2	"	6	"	13
"	26	"	3	"	7	"	14
"	27	"	4	"	8	"	15
"	28	"	5	"	9	"	16
"	29	"	6	"	10	"	17
"	30	"	7	"	11	"	18
"	31	"	8	"	12	"	19
April	1	"	9	"	13	"	20
"	2	"	10	"	14	"	21
"	3	"	11	"	15	"	22
"	4	"	12	"	16	"	23

<i>Last Day of "the Periods."</i>		<i>Labor On or About</i>		<i>Last Day of "the Periods."</i>		<i>Labor On or About</i>	
May	17	Feb.	24	June	28	April	7
"	18	"	25	"	29	"	8
"	19	"	26	"	30	"	9
"	20	"	27	July	1	"	10
"	21	"	28	"	2	"	11
"	22	Mar.	1	"	3	"	12
"	23	"	2	"	4	"	13
"	24	"	3	"	5	"	14
"	25	"	4	"	6	"	15
"	26	"	5	"	7	"	16
"	27	"	6	"	8	"	17
"	28	"	7	"	9	"	18
"	29	"	8	"	10	"	19
"	30	"	9	"	11	"	20
"	31	"	10	"	12	"	21
June	1	"	11	"	13	"	22
"	2	"	12	"	14	"	23
"	3	"	13	"	15	"	24
"	4	"	14	"	16	"	25
"	5	"	15	"	17	"	26
"	6	"	16	"	18	"	27
"	7	"	17	"	19	"	28
"	8	"	18	"	20	"	29
"	9	"	19	"	21	"	30
"	10	"	20	"	22	May	1
"	11	"	21	"	23	"	2
"	12	"	22	"	24	"	3
"	13	"	23	"	25	"	4
"	14	"	24	"	26	"	5
"	15	"	25	"	27	"	6
"	16	"	26	"	28	"	7
"	17	"	27	"	29	"	8
"	18	"	28	"	30	"	9
"	19	"	29	"	31	"	10
"	20	"	30	Aug.	1	"	11
"	21	"	31	"	2	"	12
"	22	April	1	"	3	"	13
"	23	"	2	"	4	"	14
"	24	"	3	"	5	"	15
"	25	"	4	"	6	"	16
"	26	"	5	"	7	"	17
"	27	"	6	"	8	"	18

DEVELOPMENT OF THE FÆTUS.

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<i>Last Day of "the Periods."</i>		<i>Labor On or About</i>	<i>Last Day of "the Periods."</i>		<i>Labor On or About</i>
Aug.	9	May 19	Sept.	20	June 30
"	10	" 20	"	21	July 1
"	11	" 21	"	22	" 2
"	12	" 22	"	23	" 3
"	13	" 23	"	24	" 4
"	14	" 24	"	25	" 5
"	15	" 25	"	26	" 6
"	16	" 26	"	27	" 7
"	17	" 27	"	28	" 8
"	18	" 28	"	29	" 9
"	19	" 29	"	30	" 10
"	20	" 30	Oct.	1	" 11
"	21	" 31	"	2	" 12
"	22	June 1	"	3	" 13
"	23	" 2	"	4	" 14
"	24	" 3	"	5	" 15
"	25	" 4	"	6	" 16
"	26	" 5	"	7	" 17
"	27	" 6	"	8	" 18
"	28	" 7	"	9	" 19
"	29	" 8	"	10	" 20
"	30	" 9	"	11	" 21
"	31	" 10	"	12	" 22
Sept.	1	" 11	"	13	" 23
"	2	" 12	"	14	" 24
"	3	" 13	"	15	" 25
"	4	" 14	"	16	" 26
"	5	" 15	"	17	" 27
"	6	" 16	"	18	" 28
"	7	" 17	"	19	" 29
"	8	" 18	"	20	" 30
"	9	" 19	"	21	" 31
"	10	" 20	"	22	Aug. 1
"	11	" 21	"	23	" 2
"	12	" 22	"	24	" 3
"	13	" 23	"	25	" 4
"	14	" 24	"	26	" 5
"	15	" 25	"	27	" 6
"	16	" 26	"	28	" 7
"	17	" 27	"	29	" 8
"	18	" 28	"	30	" 9
"	19	" 29	"	31	" 10

<i>Last Day of "the Periods."</i>		<i>Labor On or About</i>		<i>Last Day of "the Periods."</i>		<i>Labor On or About</i>	
Nov.	1	Aug.	11	Dec.	2	Sept.	11
"	2	"	12	"	3	"	12
"	3	"	13	"	4	"	13
"	4	"	14	"	5	"	14
"	5	"	15	"	6	"	15
"	6	"	16	"	7	"	16
"	7	"	17	"	8	"	17
"	8	"	18	"	9	"	18
"	9	"	29	"	10	"	19
"	10	"	20	"	11	"	20
"	11	"	21	"	12	"	21
"	12	"	22	"	13	"	22
"	13	"	23	"	14	"	23
"	14	"	24	"	15	"	24
"	15	"	25	"	16	"	25
"	16	"	26	"	17	"	26
"	17	"	27	"	18	"	27
"	18	"	28	"	19	"	28
"	19	"	29	"	20	"	29
"	20	"	30	"	21	"	30
"	21	"	31	"	22	Oct.	1
"	22	Sept.	1	"	23	"	2
"	23	"	2	"	24	"	3
"	24	"	3	"	25	"	4
"	25	"	4	"	26	"	5
"	26	"	5	"	27	"	6
"	27	"	6	"	28	"	7
"	28	"	7	"	29	"	8
"	29	"	8	"	29	"	8
"	30	"	9	"	30	"	9
Dec.	1	"	10	"	31	"	10

Most Reliable Calculations.

We may, in passing, just point out the great importance of a wife making, every time, a note of the last day of her "periods;" by doing so it might save her a great deal of inconvenience, uncertainty and anxiety. It may be well to bear in mind, that if the labor take place much earlier than the Pregnancy Table indicates, the chances are that the child will be a girl; but if much later, a boy.

This Pregnancy Table may, as a rule, be safely relied on, yet it





A FŒTUS OF FIVE MONTHS' AGE WITH THE SURROUNDING
MEMBRANE.

1. A portion of deciduous membrane. *b, b.* The placenta (afterbirth).
c. The chorion. *d.* The amnion with the fœtus within it.

is utterly impossible to fix upon the exact day—the approximate day can only be specified—some few ladies being at their full time as early as the 37th week; while others, although but very rarely, are not at their full time until the 45th week; hence the uncertainty in some cases of such calculations.

Although the majority of women go 280 days, many reach only 275; our Lord Jesus Christ, as recorded in the New Testament, was carried in the womb of His mother for a space of 275 days only—“counting from the Festival of the Annunciation, in the month of March, to the day of the blessed Nativity, which we celebrate in December making a period of 275.”

Remarkable Case of Short Gestation.

Although it be possible for a woman to carry her babe forty-five weeks—that is to say, five weeks past the allotted time of forty weeks—it is also possible for a lady to carry her child only twenty-eight weeks, and yet to have a living infant, and an infant to live. A practitioner relates a case similar to the one recorded by Shakespeare, where the child was born alive “full fourteen weeks before the course of time,” where the child was carried in the mother’s womb only twenty-six weeks. The child in question lived for six weeks, and then died. It might be asked, why quote Shakespeare on such a subject? We reply, Shakespeare was a true philosopher and a shrewd observer of nature and of nature’s laws. Shakespeare’s statement runs thus:—

“He came into the world

Full fourteen weeks before the course of time.”

A lady, sometimes, by becoming pregnant whilst she is suckling, is put out of her reckoning; not being unwell at such a time, she consequently does not know how to “count.” She ought, in a case of this kind, to reckon from the time that she quickens. That is to say, she must, then, consider herself nearly half-gone in her pregnancy, and to be within a fortnight of half her time; or, to speak more accurately, as soon as she has quickened, we have reason to believe that

she has gone about one hundred and twenty-four days; she has, therefore, about one hundred and fifty-six more days to complete the period of her pregnancy.

Suppose, for instance, that she first quickened on May the 17th, she may expect to be confined somewhere near October the 23d. She must bear in mind, however, that she can never make so correct a "count" from quickening (quickening taking place at such various periods) as from the last day of her "periods."

A lady is occasionally thrown out of her reckoning by the appearance, the first month after she is *enceinte*, of a little "show." This discharge does not come from the womb, as that organ is hermetically sealed; but from the upper part of the vagina—the passage to the womb—and from the mouth of the womb, and may be known from the regular menstrual fluid by its being much smaller in quantity, by its clotting and by its lasting generally but a few hours. This discharge, therefore, ought not to be reckoned in the "count," but the "period" before must be the guide, and the plan should be adopted as previously recommended.

"Is It a Boy or a Girl?"

It has frequently been asked: "Can a medical man tell, before the child is born, whether it will be a boy or a girl?" Dr. F. J. W. Packman answers in the affirmative. "Queen bees lay female eggs first, and male eggs afterwards. In the human female, conception in the first half of the time between menstrual periods produces female offspring, and male in the latter. When a female has gone beyond the time she calculated upon, it will generally turn out to be a boy." It was well to say generally, as the above remarks, as we have had cases to prove, are not invariably to be depended upon. We believe, notwithstanding, that there is a good deal of truth in Mr. Packman's statement.

Some wiseacres of nurses profess themselves to be very clever in foretelling, some months before the babe is born, whether it will be a boy or girl. They base their prognostications on some such grounds

as these, namely, on the way a lady carries her child, whether she carry her burden high or low, whether she be large or small, whether she be larger on the right side than on the left side of the abdomen, or *vice versa*, whether she be pale and sickly countenanced or of a good color and healthy-looking, whether she have been troubled much with heartburn, whether she be having a sick pregnancy, and during the childbirth whether she be having a back or a belly labor, whether it be likely to be a quick or tedious confinement.

Now, we need scarcely say that all these prognostications are utter guesswork—the coinage of a distempered brain ; but, as the number of boys and of girls born are pretty equal, they are as likely to be right as wrong. If they should happen to be right, they do not forget to tell you of it, but if wrong, they allow their prognostications to die in oblivion. If a little more common sense were, at these times, observed, patients would not be likely to be gulled by such folly, nor to be carried away by “old wives’ cunningly-devised fables.”

Proportion of the Sexes.

There are, as a rule, more boys than girls born—that is to say, for every 100 girls there are 105 boys. It is a curious fact (proving how definite the laws of nature are) how closely the different censuses proclaim and verify this statement from the *London Times* : “For generations together it had been debated whether the births of boys or girls were the more numerous, and the dispute, conducted on metaphysical or physiological probabilities, seemed as if it would never have an end. By the statistics of one census after another we have learned the proportions exactly, and the result is remarkable, as answering closely to the exigencies of life. The proportion of boys to girls is 105 to 100, but the greater dangers to which the male sex is exposed increase its share of mortality, so that as the years of any particular generation go on the numbers are first equalized, and in the end turned the other way. More men than women, in short, are required, and more boys are born than girls.”

CHAPTER XIII.

PARTURITION, OR LABOR.

First Symptoms of Labor—"Grinding Pains"—Shivering Sensations—Stomach
Sickness—Bearing Down and Cramps—Labor a Natural Process—Forced
Assistance Dangerous—Use of Instruments—Average Time of Labor—The
After-Pains—Three Stages of Labor—Directions to Nurses—Position of the
Patient—Costiveness—Use of Chloroform—What If the Doctor Is Absent?—
Stillbirths, and How to Treat Them—The Afterbirth—Clothing After Labor—
Rest and Refreshment—Bandaging—The Sick Room—Attention to the
Bladder—Treatment for the Bowels—Ignorant Nurses—Quietude and Employ-
ment.

AS the first labor is generally the most tedious and the most severe of any, it behooves a newly-married woman to "hearken unto counsel," and thus to prepare for the coming event. Strict observance of the advice contained in these pages will often make a first labor as easy and as expeditious as an after-labor. But observance of the counsel herein contained must be adopted, not only during pregnancy, but likewise during the whole period—from the very commencement—of wifehood.

A day or two before the labor commences the patient usually feels better than she has done for a long time ; she is light and comfortable ; she is smaller, and the child is lower down ; she is more cheerful, breathes more freely, and is more inclined to take exercise, and to attend to her household duties ; she has often an inclination to tidy her drawers, and to look up and have in readiness her own linen and the baby's clothes, and the other requisites for the long-expected event ; she seems to have a presentiment that labor is approaching, and she has the feeling that now is the right time to get everything in readiness, as, in a short time, she will be powerless to exert herself.

Although the majority of patients, a day or two before the labor comes on, are more bright and cheerful, some few are more anxious, fanciful, fidgety and restless.

A few days, sometimes a few hours, before labor commences, the child "falls," as it is called; that is to say, there is a subsidence—a dropping—of the womb lower down the belly. These are the reasons why she feels lighter and more comfortable, and more inclined to take exercise, and why she can breathe more freely. The only inconvenience of the dropping of the womb is, that the womb presses more on the bladder, and sometimes causes an irritability of that organ, inducing a frequent desire to make water.

One of the Earliest Symptoms.

The subsidence—the dropping—of the womb may, then, be considered one of the earliest of the precursory symptoms of childbirth, and as the herald of the coming event. She has, at this time, an increased moisture of the passage (leading to the womb) and of the external parts. She has, at length, slight pains, and then she has a "show," as it is called, which is the coming away of a mucous plug, which, during pregnancy, had hermetically sealed up the mouth of the womb. The "show" is generally tinged with a little blood. When a "show" takes place she may rest assured that labor has actually commenced. One of the early symptoms of labor is a frequent desire to relieve the bladder.

She has now "grinding pains," coming on at uncertain periods; sometimes once during two hours, at other times every hour or half hour. These "grinding pains" ought not to be interfered with; at this stage, therefore, it is useless to send for a doctor, yet the monthly nurse should be in the house, to make preparations for the coming event. Although at this early period it is not necessary to send for the medical man, nevertheless, it is well to let him know that his services might shortly be required, in order that he might be in readiness, or that he might leave word where he might quickly be found.

Pains Becoming Regular.

These "grinding pains" gradually assume more regularity in their character, return at shorter intervals, and become more severe. About

this time, shivering, in the majority of cases, is apt to occur, so as to make the teeth chatter again. Shivering during labor is not an unfavorable symptom; it proves, indeed, that the patient is in real earnest, and that she is making progress.

She ought not, on any account, unless it be ordered by the medical man, to take brandy as a remedy for the shivering. A cup either of hot tea or of hot gruel will be the best remedy for the shivering; and an extra blanket or two should be thrown over her, which ought to be well tucked around her, in order to thoroughly exclude the air from the body. The extra clothing should, as soon as she is warm and perspiring, be gradually removed, as she ought not to be kept very hot, or it will weaken her, and will thus retard her labor.

Sickness Not a Bad Symptom.

Sickness frequently comes on in the beginning of the labor, and may continue during the whole process. She is not only sick, but she actually vomits, and she can keep little or nothing on her stomach. Now, sickness in labor is rather a favorable symptom, and is usually indicative of a kind and easy confinement. There is an old saying that "sick labors are safe." Although they may be safe, they are decidedly disagreeable. Sickness, during labor, does good; it softens and dilates the parts concerned in parturition, and shows that the patient is working in downright earnest.

There is, in such a case, little or nothing to be done, as the less an irritable stomach is meddled with the better. The sickness will probably leave as soon as the labor is over. She must not, on any account, force down food—as her female friends or as a "pottering" old nurse may advise—to "grinding pains;" if she do, it will rather retard than forward her labor. She had better, during this stage, either walk about or sit down, and not confine herself to bed; indeed, there is no necessity for her, unless she particularly desire it, to remain in her chamber.

If, at the commencement of her labor, the "waters should break," even if there be no pain, the medical man ought immediately to be

sent for, as, in such a case, it is necessary that he should know the exact presentation of the child.

After an uncertain length of time the character of the pains alters. From being "grinding," they become "bearing down," and are



THE BACK FACE OF THE GRAVID UTERUS (WOMB) AND ANTERIOR FACE OF THE VAGINA AT THE END OF THE FIFTH MONTH.

now more regular and frequent, and the skin becomes both hot and perspiring. These may be considered the true labor-pains. The patient ought to bear in mind, then, that the true labor-pains are situated in the back and loins; they come on at regular intervals,

rise gradually up to a certain pitch of intensity, and abate as gradually ; it is a dull, heavy, deep sort of pain, producing occasionally a low moan from the patient ; not sharp or twinging, which would elicit a very different expression of suffering from her.

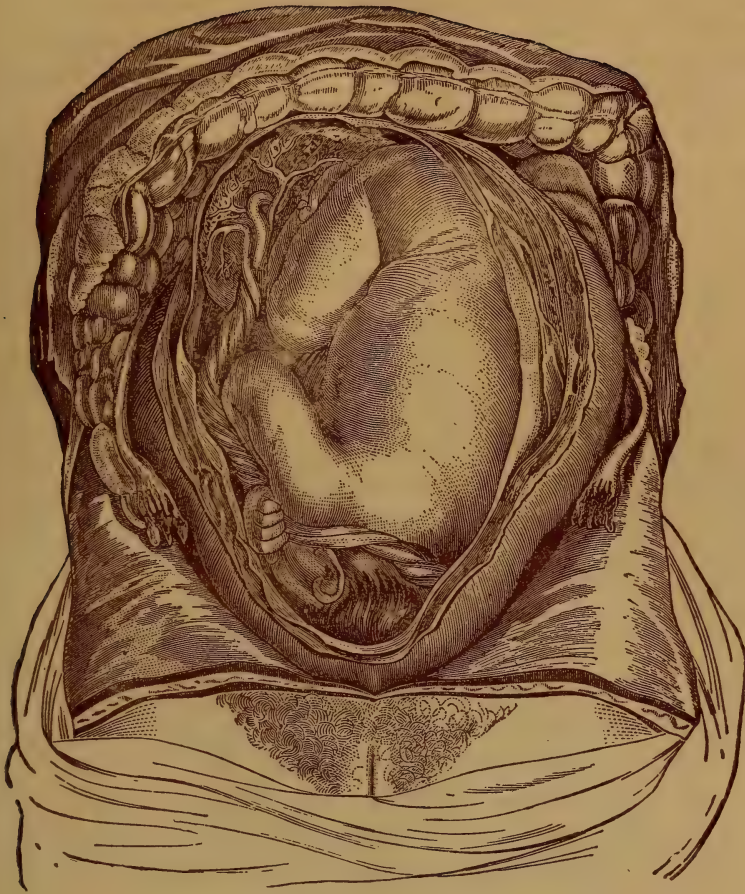
As soon as the pains assume a "bearing-down" character, the doctor ought to be in attendance ; if he be sent for during the early stage, when the pains are of a "grinding" character, and when they come on "few and far between" and at uncertain intervals (unless, as before stated, "the waters should break" early), he can do no good ; for, if he attempt in the early stage to force on the labor, he might do irreparable mischief.

Frequent Changes of Position.

Cramps of the legs and thighs are a frequent, although not a constant, attendant on childbirth. These cramps come on more especially if the patient be kept for a lengthened period in one position ; hence, the importance of allowing her, during the first and the second stages of labor, to move about the room. Cramps are generally worse during the third or last stage of labor, and, then, if they occur at all, they usually accompany each pain. The poor patient, in such a case, has, not only to bear the labor-pains, but the cramp-pains. Now, there is no danger in these cramps ; it is rather a sign that the child is making rapid progress, as he is pressing upon the nerves which supply the thighs.

The nurse ought to well rub *with* her warm hand the cramped parts ; and, if the labor be not too far advanced, it would be well for the patient to change her position, and to sit on a chair, or, if she feel inclined, to walk about the room ; there being, of course, an attendant, one on each side, to support her the while. If either a pain or a cramp should come on while she is thus moving about, let her instantly take hold of something for support.

Labor—and truly it may be called "labor"—is a natural process, and, therefore, ought not unnecessarily to be interfered with, or woe betide the unfortunate patient. We firmly believe that a woman



POSITION OF THE CHILD AT BIRTH.

would stand a much better chance of getting well over her confinement without assistance than if she had been hurried with assistance.

In a natural labor very little assistance is needed, and the doctor is only required in the room occasionally to ascertain that things are going on rightly. Those ladies do best, both at the time and afterwards, who are the least interfered with. Bear this in mind, and let it be legibly written on your memory. This advice, of course, only holds good in natural confinements. Meddlesome midwifery cannot be too strongly reprobated. The duty of a doctor is to watch the progress of a childbirth, in order that if there be anything wrong, he may rectify it; but if the labor be going on well, he has no business to interfere, and he need not be much in the lying-in room, although he should be in an adjoining apartment.

There are times, and times without number, when a medical man is called upon to do but little or nothing, and there are others—few and far between—when it is imperatively necessary that he should do a great deal. He ought, at all times, to be as gentle as a lamb, but should, in certain contingencies, be as fearless as a lion.

Use of Instruments.

An accoucheur's hand should be firm, and yet gentle; his heart should be tender, and yet brave. Having made up his mind to the right course, he should pursue it without let or hindrance, without interference, without wavering and without loss of time. Moments in such cases are most precious; they often determine whether the mother shall do well, and whether the babe shall live or die. How many a child has died in the birth, in a hard and tedious labor, from the use of instruments having been too long delayed. Instruments, in a proper case and judiciously applied, are most safe; they are nothing more than thin hands—to bring away the head—when the head is low enough in the birth—the doctor's hands being too thick for the purpose. Many hours of intense suffering, and many years of unavailing regrets from the needless loss of the child might have been saved if instruments had been used the moment mechanical

aid was indicated—that is to say, in a case, for instance, where the child remained for some hours stationary in the birth, although the pains continued intensely strong and very forcing. Hence, the importance, in midwifery, of employing a man of talent, of experience, of judgment and of decision. No branch of the profession requires more skill than that of an accoucheur.

The first confinement is generally twice the length of time of an after one, and usually the more children a lady has had, the quicker is her labor; but this is by no means always the case, as some of the after-labors may be the tedious, while the early ones may be the quick ones. It ought to be borne in mind, too, that tedious labors are oftentimes natural, and that they only require time and patience from all concerned to bring them to a successful issue.

Usual Length of Time.

It may be said that a first labor, as a rule, lasts six hours, while an after-confinement probably lasts but three. This space of time, of course, does not usually include the commencement of labor pains; but the time that a lady may be actually said to be in real travail. If we are to reckon from the commencement of the labor, we ought to double the above numbers—that is to say, we should make the average duration of a first labor, twelve; of an after one, six hours.

When a lady marries late in life—for instance, after she has passed the age of thirty—her first labor is usually much more lingering, painful and tedious, demanding a great stock of patience from the patient, from the doctor and from the friends; notwithstanding which, if she be not hurried and be not much interfered with, both she and her babe generally do remarkably well. Supposing a lady marries late in life, it is only the first confinement that is usually hard and lingering; the after-labors are as easy as though she had married when young.

Slow labors are not necessarily dangerous; on the contrary, a patient frequently has a better and more rapid recovery, provided there has been no interference, after a tedious than after a quick

confinement—proving beyond doubt that nature hates hurry and interference. It is an old saying, and we believe a true one, that a lying-in woman must have pain either before or after her labor; and it certainly is far preferable that she should have the pain and suffering before than after the delivery is over.

Results Effected by After-Pains.

It is well for a patient to know that, as a rule, after a first confinement, she never has after-pains. This is some consolation, and is a kind of compensation for her usually suffering more with her first child. The after-pains generally increase in intensity with every additional child. The after-pains are intended by nature to contract, to reduce, the womb somewhat to its non-pregnant size, and to assist clots in coming away, and therefore ought not to be needlessly interfered with. A judicious medical man will, however, if the pains be very severe, prescribe medicine to moderate, not to stop, them. A doctor, fortunately, possesses valuable remedies to alleviate the after-pains.

Nature, beneficent nature, oftentimes works in secret, and is doing good service by preparing for the coming event, unknown to all around. Pain, in the very earliest stages of labor, is not a necessary attendant. Although pain and suffering are the usual concomitants of childbirth, there are, nevertheless, well authenticated cases on record of painless parturition.

The Three Stages of Labor.

A natural labor may be divided into three stages. The first, the premonitory stage, comprising the "falling" or subsidence of the womb, and the "show." The second, the dilating stage, which is known by the pains being of a "grinding" nature, and in which the mouth of the womb gradually opens or dilates until it is sufficiently large to admit the exit of the head of the child, when it becomes the third, the completing stage, which is now indicated by the pains being of a "bearing-down," expulsive character.

Now, in the first or premonitory stage, which is much the longest of the three stages, it is neither necessary nor desirable that the patient should be confined to her room; on the contrary, it is better for her to be moving about the house, and to be attending to her household duties.

In the second and dilating stage, it will be necessary that she should be confined to her room, but not to her bed. If the drawing-room be near at hand, she ought occasionally to walk to it, and if a pain should come on the while, lie on the sofa. In this stage it is not at all desirable that she should keep her bed, or even lie much on it. She is better up and about, and walking about the room.

A Necessary Caution.

In the first and second stages she must not, on any account, strain or bear down to the pains, as many ignorant nurses advise, as by robbing her of her strength it would only retard the delivery. Besides, while the mouth of the womb is dilating, bearing down cannot be of the slightest earthly use—the womb is not in a fit state to expel its contents. If by bearing down she could (but which, fortunately, she cannot) cause the expulsion of the child, it would, at this stage, be attended with frightful consequences—no less than with the rupture of the womb. Therefore, for the future let not a lady be persuaded, either by an ignorant nurse or by an officious friend, to bear down until the last or the completing stage, when a gentle bearing-down will assist the pains to expel the child.

In the third or completing stage it is, of course, necessary that she should lie on the bed, and that she should, as above advised, bear gently down to the pains. The bearing-down pains will indicate to her when to bear down.

If, towards the last, she be in great pain, and if she feel inclined to do so, let her cry out, and it will relieve her. A foolish nurse will tell her that if she make a noise it will do her harm. Away with such folly, and have nothing to do with such simpletons. Shakespeare gives excellent advice in this matter:

“Give sorrow words: the grief, that does not speak,
Whispers the o’er-fraught heart, and bids it break.”

The position varies according to the country. Delivery, in some countries, such as France, is usually effected while the patient is lying on her back ; in other countries, while she is standing ; in others, while she is on her knees ; in others, while she is in a kind of an arm-chair, made for the purpose, with a false bottom to it, and called a "groaning-chair ;" while, in other instances, such as in England, the patient is delivered while she is on her left side, and which is, both for the doctor and for the patient, by far the most delicate, convenient and safe method.

We should strongly prefer a patient not to put everything off to the last. She must take care to have in readiness a good pair of scissors and a skein of whitey-brown thread. And she ought to have in the house a small pot of prepared lard, and a flask of salad oil, that they may be at hand in case they be wanted. Some doctors, at such times, prefer the prepared lard ; while others prefer the salad oil. Let everything necessary, both for herself and the babe, be well aired and ready for immediate use, and be placed in such order that all things may, without hurry or bustle, at a moment's notice be found.

Treatment for Costiveness.

Another preparation for childbirth, and a most important one, is attending to the state of the bowels. If they be at all costive, the moment there is the slightest premonitory symptom of labor, she ought to take either a tablespoonful or a dessert-spoonful (according to the nature of her bowels, whether she be easily moved or otherwise,) of castor oil. If she object to taking the oil, then let her have an enema of warm water—a pint—administered. She will, by adopting either of the above plans, derive the greatest comfort and advantage ; it will prevent her delicacy from being shocked by having her bowels opened, without her being able to prevent them, during the last stage of the labor ; and it will, by giving the adjacent parts more room, much expedite the delivery and lessen her sufferings.

The next thing to be attended to is the way in which she ought to be dressed for the occasion. We would recommend her to put on

her clean night-gown ; which, in order to keep it unsoiled, should be smoothly and carefully rolled up about her waist ; then she ought to wear over it a short bed-gown reaching to her hips, and have on a flannel petticoat to meet it, and then she should over all put on a dressing-gown. If it be winter, the dressing-gown had better either be composed of flannel or be lined with that material.

The stays must not be worn, as by preventing the muscles of the chest and of the belly from helping the expulsion of the child, they would interfere with the progress of the labor.

Away with Gossiping Croakers.

Many attendants are not only unnecessary, but injurious. They excite and flurry the patient, they cause noise and confusion, and rob the air of its purity. One lady friend, besides the doctor and the monthly nurse, is all that is needed. In making the selection of a friend, care should be taken that she be the mother of a family, that she be kind-hearted and self-possessed, and of a cheerful turn of mind. All "chatterers," "croakers" and "potterers" ought, at these times, to be carefully excluded from the lying-in room. No conversation of a depressing character should for one moment be allowed. Nurses and friends who are in the habit of telling of bad cases that have occurred in their experience, must be avoided as the plague. If nurses have had bad cases, many of them have probably been of their own making ; such nurses, therefore, ought, on every account, to be shunned.

Another preparation for labor is, to soothe her mind by telling her of the usual safety of confinements, and by assuring her that, in the generality of instances, it is a natural process, and no disease whatever, and that all she had to do is to keep up her spirits, to adhere strictly to the rules of her doctor, to have a little patience, and that she will do remarkably well. Remind her, too, of passages from the sweet Singer of Israel, which are full of hope and of comfort : "Heaviness may endure for a night, but joy cometh in the morning." "Thou hast turned my heaviness into joy," and "girded me with

gladness." "They that sow in tears shall reap in joy." Again: "I was in misery, and he helped me."

Joy that a Child is Born.

Tell her, too, that "sweet is pleasure after pain," and of the exquisite happiness and joy she will feel as soon as her labor is over, as, perhaps, the greatest thrill of delight a woman ever experiences in this world is when her babe is first born. She, as if by magic, forgets all the sorrow and suffering she has endured. Keble, in the *Christian Year*, well observes:

"Mysterious to all thought,
A mother's prime of bliss,
When to her eager lips is brought
Her infant's thrilling kiss."

How beautifully, too, he sings of the gratitude of a woman to God for her safe delivery from the perils and pangs of childbirth:

"Only let heaven her fire impart,
No richer incense breathes on earth:
'A spouse with all a daughter's heart,'
Fresh from the perilous birth,
To the great Father lifts her pale glad eye,
Like a reviving flower when storms are hushed on high."

Chloroform in Hard and Lingering Labor.

Mothers and doctors are indebted to Sir James Simpson for the introduction of chloroform, one of the greatest and most valuable discoveries ever conferred on suffering humanity.

Dr. Simpson, on first propounding the theory of the application of chloroform to patients requiring surgical aid, was stoutly opposed by certain objectors, who held that to check the sensation of pain in connection with "visitations of God" was to contravene the decrees of an All-wise Creator. What was his answer? That the Creator, during the process of extracting the ribs from Adam, must necessarily have adopted a somewhat corresponding artifice—"For did not God throw Adam into a deep sleep?" The Pietists were satisfied, and the discoverer triumphed over ignoble and ignorant prejudice.

The inhalation of chloroform, according to the will of the operator, causes either partial or complete unconsciousness, and, either for a longer or for a shorter time, freedom from pain. In other words, the effects might with perfect safety be continued either for a few minutes, or from time to time for several hours; indeed, if given in proper cases, and by a judicious doctor, with immense benefit, and with perfect safety.

Chloroform is more applicable and useful in a labor, more especially in a first confinement, when it is lingering, when the throes are very severe, and when, notwithstanding the pain, the labor is making but little progress; then chloroform is a priceless boon. Chloroform, too, is, when the patient is of a nervous temperament, and when she looks forward with dread and apprehension to every pain, very beneficial.

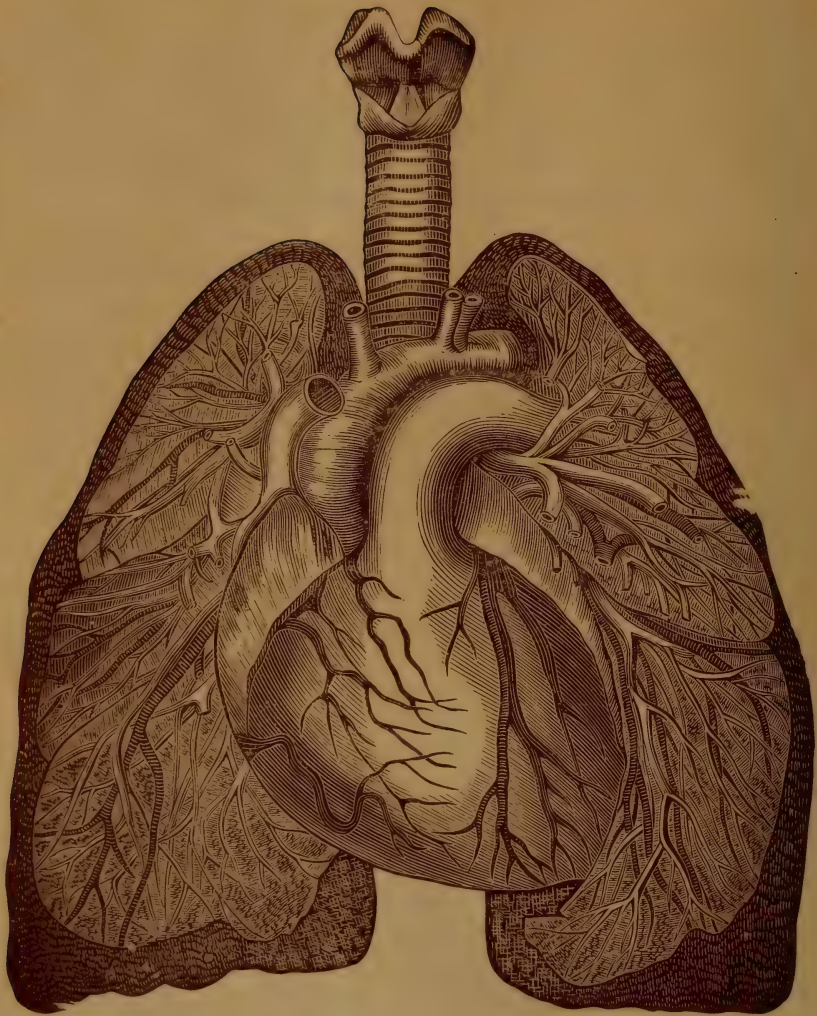
It might be asked, would you give chloroform in every case of labor, be it ever so easy and quick? Certainly not; it is neither advisable nor expedient in an ordinary, easy, quick confinement to administer it. The cases in which it is desirable to give chloroform are all lingering, hard and severe ordinary labors; in such we would gladly use it.

Chloroform, Properly Administered, is Safe.

One important consideration in the giving of chloroform in labor is that a patient has seldom, if ever, while under the effects of it, been known to die; which is more than can be said when it has been administered in surgical operations, in the extraction of teeth, etc. Says Dr. Kidd: "I know there is not one well-attested death from chloroform in midwifery in all our journals."

One reason why it may be so safe to give chloroform in labor is that in the practice of midwifery a medical man does not deem it needful to put his patient under the extreme influence of it. He administers just enough to ease her pain, but not sufficient to rob her of total consciousness; while in a surgical operation the surgeon may consider it necessary to put his patient under the full influence of chloroform; hence the safety in the one, and the danger in the other

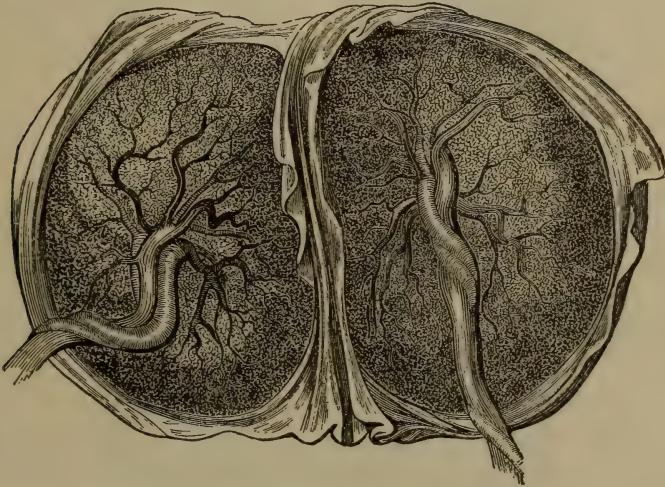




THE HEART AND LUNGS, SHOWING THE BLOOD-VESSELS IN THE LUNGS:
THE RUPTURE OF ANY ONE MAY CAUSE SPITTING OF BLOOD.

case. It is quite possible to afford immense relief, to "render the pains quite bearable," as a patient of mine observed, by a dose which does not procure sleep or impair the mental condition of the patient, and which all our experience would show is absolutely free from danger.

Chloroform ought never to be administered, either to a patient in labor or to any one else, except by a medical practitioner. This advice admits of no exception. And chloroform should never be given unless it be either in a lingering or in a hard labor. As we have before



TWIN PLACENTÆ, OR AFTERBIRTHS, SHOWING NAVEL-STRINGS.

advised, in a natural, easy, every-day labor, nature ought not to be interfered with, but should be allowed to run its own course. Patience, gentleness, and non-interference are the best and the chief requisites required in the majority of labor cases.

When the Doctor is Unavoidably Absent.

It frequently happens that after the first confinement the labor is so rapid that the child is born before the doctor has time to reach the patient. It is consequently highly desirable—nay, imperatively necessary—for the interest and for the well-doing both of the mother and

of the babe, that either the nurse or the lady friend should, in such an emergency, know what to do and what not to do. We, therefore, in the few following paragraphs, purpose, in the simplest and clearest language we can command, to enlighten them on the subject.

Directions to the Attendants.

In the first place, let the attendants be both calm and self-possessed, and let there be no noise, no shuffling, no excitement, no whispering, and no talking, and let the patient be made to thoroughly understand that there is not the slightest danger, as the principal danger will be in causing unnecessary fears both as to herself and her child. Thousands of children are born without the slightest assistance from a doctor—he not being at hand or not being in time—and yet both mother and babe almost invariably do well. Let her be informed of this fact—for it is a fact—and it will be a comfort to her.

In the meantime, let the following directions be followed: Supposing a child to be born before the medical man arrives, the nurse ought then to ascertain whether a coil of navel-string be around the neck of the infant; if it be, it must be instantly liberated, or he might be strangled. Care should be taken that he has sufficient room to breathe, that there be not a “membrane” over his mouth, and that his face be not buried in the clothes. Any mucus about the mouth of the babe ought, with a soft napkin, to be wiped away, or it might impede the breathing.

How to Treat Apparent Stillbirths.

If the babe should be born apparently dead, a few smart blows must be given on the buttocks and on the back; a smelling-bottle ought to be applied to the nostrils, or rag should be singed under the nose, taking care that the burning tinder does not touch the skin, and cold water must be freely sprinkled on the face. But after all, a good smacking of the bottom, in an apparently still-born babe, is, in restoring animation, often the most handy, quick and ready remedy. Thousands of apparently still-born children have, by this simple remedy

alone, been saved from threatened death. If you can once make an apparently still-born babe cry—and cry he must—he is, as a rule, safe. The navel-string, as long as there is pulsation in it, ought not to be tied.

The limbs, the back and the chest of the child ought, with the



POSITION OF TWINS IN THE WOMB.

warm hand, to be well rubbed. The face should not be smothered in the clothes. If pulsation have ceased in the navel-string (the above rules having been strictly followed, and having failed), let the navel-string be tied and divided, and then let the child be plunged into warm water—98° Fahr. If the sudden plunge does not rouse res-

piration into action, let him be taken out of the warm bath, as the keeping him for any length of time in the water will be of no avail.

If these simple means should not quickly succeed, although they generally will, Dr. Marshall Hall's "Ready Method" ought in the following manner to be tried: "Place the infant on his face, turn the body gently but completely on the side and a little beyond, and then on the face alternately; repeating these measures deliberately, efficiently and perseveringly, fifteen times in the minute only."

How to Restore Suspended Animation.

Another plan of restoring suspended animation is by artificial respiration, which should be employed in the following manner: Let the nurse (in the absence of the doctor) squeeze with her left hand the child's nose to prevent any passage of air through the nostrils; then let her apply her mouth to the child's mouth, and breathe into it, in order to inflate the lungs; as soon as they are inflated, the air ought, with the right hand, to be pressed out again, so as to imitate natural breathing. Again and again for several minutes, and for about fifteen times a minute, should the above process be repeated, and the operator will frequently be rewarded by hearing a convulsive sob, which will be the harbinger of renewed life.

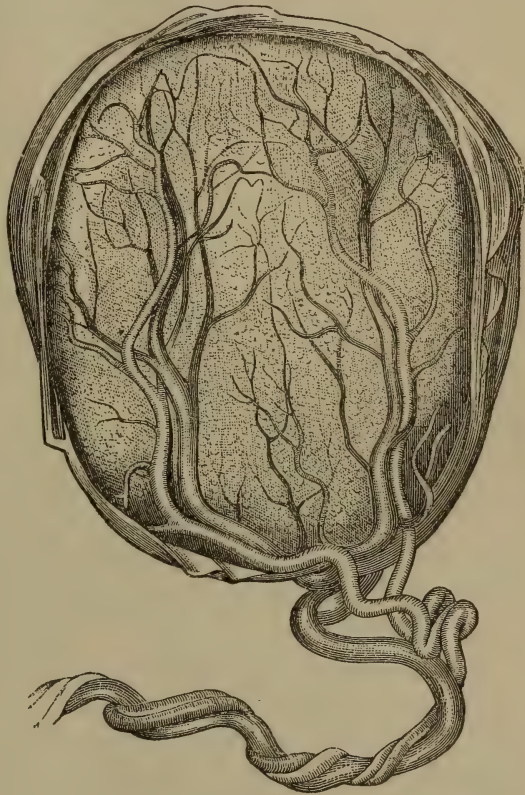
Until animation be restored, the navel-string, provided there be pulsation in it, ought not to be tied. If it be tied before the child have breathed, and before he have cried, he will have but a slight chance of recovery. While the navel-string is left entire, provided there be still pulsation in it, he has the advantage of the mother's circulation and support.

Should the child have been born for some time before the doctor have arrived, it may be necessary to tie and to divide the navel-string. The manner of performing it is as follows: A ligature, composed of four or five whitey-brown threads, nearly a foot in length, and with a knot at each end, ought, by a double knot, to be tightly tied at about two inches from the body of the child around the navel-string. A second ligature must, in a similar manner, be applied about three

inches from the first, and the navel-string should be carefully divided midway between the two ligatures. Of course, if the medical man be shortly expected, any interference would not be advisable, as such matters ought always to be left entirely to him.

The afterbirth must never be brought away by the nurse. If the doctor have not arrived, it should be allowed to come away (which, if left alone, in the generality of cases it usually will) of its own accord. The only treatment that the nurse ought in such a case to adopt is, that she apply, by means of her right hand, firm pressure over the region of the womb; this will have the effect of encouraging the contraction of the womb, of throwing off the afterbirth and of preventing violent flooding.

If the afterbirth does not soon come away, say in an hour, or if there be flooding, another physician ought to be sent for; but on no account should the nurse be allowed to interfere with it further than by applying firm pressure over the region of the womb, and not touching the navel-string at all, as we have known dangerous, and in some cases even fatal, consequences to ensue from such meddling. Officious



BATTLEDORE PLACENTA, OR AFTERBIRTH,
SHOWING NAVEL-STRING.

nurses have frequently been known, in their anxiety, to get the labor entirely over by themselves, without the doctor's assistance, to actually tear away by violence the navel-string from the afterbirth—the afterbirth being the while in the womb—the blood in consequence flowing away from the lacerated afterbirth in torrents; so that the moment the doctor arrives—if he fortunately arrive in time—he has been obliged, in order to save his patient's life, to introduce his hand at once into the womb, and to bring the afterbirth bodily away. Meddlesome nurses are, then, most dangerous, and should be carefully shunned.

Rest After Delivery.

A lady, for at least an hour after delivery, ought not to be disturbed; if she be, violent flooding might be produced. The doctor, of course, will, by removing the soiled napkins, and by applying clean ones in their place, make her comfortable. Her head ought to be easy; she must still lie on her side; indeed, for the first hour, let her remain nearly in the same position as that in which she was confined, with this only difference, that if her feet have been pressing against the bed-post, they should be removed from that position.

Clothing After Labor.

She ought, after the lapse of an hour or two, to be moved from one side of the bed to the other. It should be done in the most tender and cautious manner. She must not, on any account whatever, be allowed to sit erect in the bed. While being moved, she herself should be passive—that is to say, she ought to use no exertion—no effort—but should, by two attendants, be removed from side to side; one must take hold of her shoulders, the other of her hips.

A patient, after delivery, usually feels shivering and starved; it will therefore be necessary to throw additional clothing, such as a blanket or two, over her, which ought to envelop the body, and should be well tucked around her; but the nurse ought to be careful not to overload her with clothes, or it might produce flooding, fainting, etc. As soon, therefore, as she be warmer, let the extra clothing be

gradually removed. If the feet be cold, let them be wrapped in a warm flannel petticoat, over which a pillow should be placed.

A frequent change of linen after childbirth is desirable. Nothing is more conducive to health than cleanliness. Great care should be taken to have the sheets and linen well aired. A foolish nurse fancies that clean linen will give her patient cold, and that dirty linen will prevent it, and keep her warm. Such folly is most dangerous. A lying-in woman should bear in mind that dirt breeds fever and fosters infectious diseases. There would, if cleanliness (of course we include pure water in this category) and ventilation were more observed than they are, be very little of fever, or of infectious diseases of any kind in the world.

Refreshment After Labor.

A cup of cool, black tea, directly after the patient is confined, ought to be given. We say cool, not cold, as cold tea might chill her. Hot tea would be improper, as it might induce flooding. As soon as she is settled in bed, there is nothing better than a small basin of warm gruel.

Brandy ought never, unless ordered by the doctor, to be given after a confinement. Warm beer is also objectionable; indeed, stimulants of all kinds must, unless advised by the doctor, be carefully avoided, as they would only produce fever, and probably inflammation.

Bandage After Labor.

This consists of thick linen, similar to sheeting, about a yard and a half long, and sufficiently broad to comfortably support the belly. Two or three folded diapers—folded in a triangular shape—should be first applied over the region of the womb, and then the bandage should be neatly and smoothly applied around the lower portion of the belly to keep the diapers firmly fixed in their position. The bandage ought to be put on moderately tight, and should be retightened every night and morning, or oftener if it become slack. If there be not either a proper bandage or binder at hand, a yard and a half of unbleached calico, folded double, will answer the purpose.

A support to the belly after labor is important ; in the first place, it is a great comfort ; in the second, it induces the belly to return to its original size ; and, lastly, it prevents flooding. Those ladies, more especially if they have had large families, who have neglected proper bandaging after their confinements, frequently suffer from enlarged and pendulous bellies, which give them an unwieldy and ungainly appearance ; indeed, completely ruining their figures.

Placing the Patient in Bed.

She ought not, immediately after a labor, under any pretext or pretence whatever, to be allowed to raise herself in bed. If she be dressed as recommended in a previous paragraph, her soiled linen may readily be removed ; and she may be drawn up by two assistants—one being at her shoulders and the other at her legs—to the proper place, as she herself must not be allowed to use the slightest exertion. Inattention to the above recommendation has sometimes caused violent flooding, fainting, bearing-down of the womb, etc., and in some cases even fatal consequences.

The Lying-In Room.

A nurse is too apt, after the confinement is over, to keep a large fire. Nothing is more injurious than to have the temperature of a lying-in room high. A little fire, provided the weather be cold, to dress the baby by, and to encourage a circulation of the air, is desirable. A fire-guard ought to be used when there is an open fire in the room. The door, in order to change the air of the apartment, must occasionally be left ajar ; a lying-in woman requires pure air as much as or more than any other person ; but how frequently does a silly nurse fancy that it is dangerous for her to breathe it.

Unventilated air is bad air ; bad air is bad for every one, but especially for a lying-in patient. Bad air is only another name for poisoned air ; bad air is spent air—is full of air that has been breathed over and over again until it becomes foul and foetid, and quite unfit to be what it ought to be, food for the lungs. Bad air is a wholesale

poisoner. Bad air is one cause why the death-rate is so fearfully high. Bad air, bad drains, and bad water—water contaminated with fæcal matter from the water-closets—are the three Grand Executioners ; they destroy annually tens of thousands of victims, selecting especially delicate women and helpless children.

Perfect Quiet Indispensable.

After the labor is over, the blinds ought to be put down, and the window-curtains should be drawn, in order to induce the patient to have a sleep, and thus to rest herself after her hard work. Perfect stillness must reign, both in the room and in the house. This advice is most important.

It is really surprising, in this present enlightened age, how much ignorance there still is among the attendants of a lying-in room ; they fancy labor to be a disease, instead of being what it really is—a natural process—and that old-fashioned notions, and not common sense ought to guide them. Oh, it is sad, that a child-bed woman should, of all the people in the world, be in an especial manner the target for folly shafts to aim at.

The patient should, after the birth of her child, be strictly prohibited from talking, and noisy conversation ought not to be allowed ; indeed, she cannot be kept too quiet, as she may then be induced to fall into a sweet sleep, which would recruit her wasted strength. As soon as the babe be washed and dressed, and the mother be made comfortable in bed, the nurse ought alone to remain ; let every one else be banished the lying-in room. Visitors should on no account, until the medical man give permission, be allowed to see the patient.

Many a patient has been made really feverish and ill by a thoughtless visitor, connived at by a simpleton of a nurse, intruding herself, soon after a confinement, into the lying-in room. It should be borne in mind, and let there be no mistake about it, that for the first ten days or a fortnight, a lying-in woman cannot be kept too quiet ; that excitement at such times is sure to be followed by debility, and that excitement is a species of dram-drinking, which leaves a sting behind.

Bad gettings about are frequently due to visitors being allowed to see and to chatter with lying-in patients.

It is high time that this reprehensible practice was put an end to. If a friend have the patient's welfare really at heart, she should not, until the expiration of at least ten days, visit her. Of course, inquiries may, from time to time, be made at the street door, but no visitors, during that time, should be admitted into the lying-in chamber. We are quite sure that if this advice were strictly followed, much suffering may be averted. Perfect rest after confinement is most essential to recovery, and is the best of medicines.

Attention to the Bladder.

If there be any difficulty in her making water, the medical man must, through the nurse, be immediately informed of it. False delicacy ought never to stand in the way of this advice. It should be borne in mind, that after either a very lingering or a severe labor there is frequently retention of urine—that is to say, that although the bladder may be full of water, the patient is, without assistance, unable to eject it.

If she be not successful—twenty-four hours having elapsed—the doctor must be informed of the fact, and it will then be necessary—absolutely necessary—for him, by means of a catheter, to draw off the water. It might be well to state that the passing of a catheter is unattended with either the slightest danger or with the least pain; and that it is done without exposing her, and thus without shocking her modesty, and that it will afford instant relief. Sometimes one passing of the catheter is sufficient; at other times it has, for three or four days, or even longer—that is to say, until the bladder has recovered its tone—to be passed daily. If a patient would, during the progress of her confinement, more especially if the labor be tedious, pass water frequently, say every two or three hours, the necessity of passing a catheter, after the labor is over, would often be prevented. Now this advice, is worth bearing in mind.

An enema is, both during suckling and during pregnancy, an

admirable method of opening costive bowels, and deserves to be more universally followed than it now is ; fortunately, the plan is making rapid progress, and shortly will, at such times, entirely supersede the necessity of administering aperients by the mouth. Aperients by the mouth are both a clumsy and a roundabout way of opening costive bowels, and sometimes harass the patient exceedingly.

The lower bowel, and not the stomach, wants emptying ; the stomach wants leaving alone, and not to be worried by opening physic. The stomach has its proper work to do, namely, to digest the food put into it, and which aperients sadly interfere with ; hence the great value, in such cases, of enema, and of keeping the bowels open, when possible, by fruit and not by physic, by gentleness and not by violence.

Aperients, after a confinement, were in olden times, as a matter of course, repeatedly given, both to the mother and to the babe, to their utter disgust and to their serious detriment. This was only one of the numerous mistakes, prejudices and follies that formerly prevailed in the lying-in room. Unfortunately, in those days a confinement was looked upon as a disease, and to be physicked accordingly ; there was some imaginary evil to be driven out. A better state of things is, happily, now beginning to dawn ; but there is great darkness of ignorance—and ignorance is, indeed, dark—still to be dispelled.

Ablutions for the Watery Discharge.

The watery discharge occurs directly after a lying-in, and lasts either a week or a fortnight, and sometimes even longer. It is, at first, of a reddish color ; this gradually changes to a brownish hue, and afterwards to a greenish shade ; hence the name of “green waters.” It has in some cases a disagreeable odor. A moderate discharge is necessary ; but when it is profuse, it weakens the patient.

Some ignorant nurses object to having the parts bathed after delivery ; they have the impression that such a proceeding would give cold. Now, warm fomentations twice a day, and even oftener, either if the discharge or if the state of the parts require it, are absolutely indispensable to health, to cleanliness and comfort. Ablutions, indeed, at

this time are far more necessary than at any other period of a woman's existence. Neglect of bathing the parts, at these times, is shameful neglect, and leads to miserable consequences.

There is nothing better for the purpose of these bathings than a soft sponge and warm water, unless the parts be very sore ; if they be, a warm fomentation, two or three times a day, of marshmallows and camomile, will afford great relief ; or the parts may be bathed with warm, well-made and well-boiled oatmeal gruel—of course, without salt. In these cases, too, we have found warm barm (yeast) and water a great comfort, and which will soon take away the soreness. The parts ought, after each fomentation, to be well but quickly dried with warm, dry, soft towels. The parts, after the bathing and the drying, should, by means of a piece of linen rag, be well annointed with warm salad oil. Warm salad oil for this purpose is a most soothing, healing and comforting dressing, and is far superior to all animal greases.

A Good Nurse Required.

If the internal parts be very sore, it will be necessary, two or three times a day, to syringe them out by means of an india-rubber vaginal syringe, with either of the above remedies. Hence the importance of having a good monthly nurse—of having one who thoroughly understands her business.

Let the above rules be strictly followed. Let no prejudices and no old-fashioned notions, either of the nurse or of any female friend, stand in the way of the above advice. Ablution of the parts, then, after a confinement, and that frequently, is absolutely required, or evil results will, as a matter of course, ensue.

A horizontal—a level—position for either ten days or a fortnight after a labor is important. A lady frequently fancies that, if she support her legs, it is all that is necessary. Now, this is absurd ; it is the womb, and not the legs, that requires rest ; and the only way to obtain it is by lying flat either on a bed or on a sofa ; for the first five or six days, day and night, on a bed, and then for the next five or six days she ought to be removed for a short period of the day either to

another bed or to a sofa ; which other bed or sofa should be wheeled to the side of the bed, and she must be placed on it by two assistants, one taking hold of her shoulders and the other of her hips, and thus lifting her on the bed or sofa, she herself being perfectly passive, and not being allowed to sit erect the while. She ought, during the time she is on the sofa, to maintain the level position.

She ought, after the first nine days, to sit up for an hour ; she should gradually prolong the time of the sitting up, but still she must, for the first fortnight, lie down a great part of every day. She should, after the first week, lie either on a sofa or on a horse-hair mattress.

Household Employment.

The above plan may appear irksome, but experience teaches that it is necessary—absolutely necessary. The old saw, after a confinement, is well worth remembering : “ To be soon well, be long ill.” The benefit the patient will ultimately reap from perfect rest and quietude will amply repay the temporary annoyance. Where the above rules have not been adopted, we have known flooding, bearing-down of the womb, and even “ falling ” of the womb, frequent miscarriages and ultimately ruin of the constitution, to ensue.

Some persons have an idea that a wife, for some months after childbirth, should be treated as an invalid—should lead an idle life. This is an error ; for all people in the world, a nursing mother should remember that “ employment is nature’s physician, and is essential to human happiness.” The best nurses and the healthiest mothers, as a rule, are workingmen’s, wives, who are employed from morning until night—who have no spare time unemployed to feel nervous, or to make complaints of aches and of pains or pity themselves ; indeed, so well does “ nature’s physician ”—employment—usually make them feel, that they have really no aches or pains at all—either real or imaginary—to complain of, but are hearty and strong, happy and contented ; indeed, the days are too short for them.

CHAPTER XIV.

MISCARRIAGE.

The Young Wife—Miscarriage Can Generally be Prevented—Necessity of Judicious Advice—Penalties of Ignorance—Causes of Premature Labor—Violence of Every Kind to be Avoided—Threatening Symptoms—Decided Symptoms—Two Stages—Time of Greatest Danger—Flooding Treatment for Miscarriage—Great Care Required—Sponge and Shower-baths—Separate Sleeping Apartment—Healthful Exercise.

IF a premature expulsion of the child occur before the end of the seventh month, it is called either a miscarriage or an abortion; if between the seventh month and before the full period of nine months, a premature labor. A premature labor, in the graphic language of the Bible, is called "an untimely birth," and "untimely" in every sense of the word it truly is. "Untimely" for mother; "untimely" for doctor; "untimely" for monthly nurse; "untimely" for all preconcerted arrangements; "untimely" for child, causing him "untimely" death. A more expressive word for the purpose it is impossible to find.

There is a proneness for a young wife to miscarry, and woe betide her if she once establish the habit, for it, unfortunately, often becomes a habit. A miscarriage is a serious calamity, and should be considered in that light; not only to the mother herself, whose constitution frequent miscarriages might seriously injure, and eventually ruin, but it might rob the wife of one of her greatest earthly privileges, the inestimable pleasure and delight of being a mother.

Now, as a miscarriage may generally be prevented, it behooves a wife to look well into the matter, and to study the subject thoroughly for herself, in order to guard against her first miscarriage; for the first miscarriage is the one that frequently leads to a series. How necessary it is that the above important fact should be borne in mind! How much misery might be averted; as then means would, by avoiding the usual causes, be taken to ward off such an awful calamity,

We are quite convinced that in the majority of cases miscarriages may be prevented.

Necessity of Correct Information.

Hence the importance of a popular work of this kind—to point out dangers, to give judicious advice, that a wife may read, ponder over, and “inwardly digest,” and that she may see the folly of the present practices that wives—young wives especially—usually indulge in, and thus that she may avoid the rocks they split on, which make a shipwreck of their most cherished hopes and treasures. How, unless a wife be taught, can she gain such information? That she can know it intuitively is utterly impossible. She can only know it from her doctor, and from him she does not often like to ask such questions.

She must, therefore, by a popular work of this kind be enlightened, or loss of life to her unborn babe, and broken health to herself, will, in all probability, be the penalties of her ignorance. It is utter folly to say that all such matters should be left entirely to the doctor—the mischief is usually done before he is consulted; besides, she herself is the right person to understand it, as she herself is the one to prevent it, and the one, if it be not prevented, to suffer. How many a broken constitution and an untimely end have resulted from the want of such knowledge as is contained in this book. It is perfectly ridiculous to assert that a doctor can, in a few minutes’ consultation, thoroughly inform a pregnant female of all that is necessary for her to know for the prevention of a miscarriage.

Causes and Evils of Miscarriage.

Let it then be thoroughly understood—first, that a miscarriage is very weakening—more weakening than a labor; and, secondly, that if a lady once miscarried, she is more likely to miscarry again and again, until, at length, her constitution be broken, and the chances of her having a child become small indeed. Woe betide such an one if she become the victim of such a habit.

A slight cause will frequently occasion the separation of the child from the mother, and the consequent death and expulsion of the

fœtus ; hence the readiness with which a lady sometimes miscarries. The following are the most common causes of a young wife miscarrying : Taking long walks ; riding on horseback, or over rough roads in a carriage ; a long railway journey ; over-exerting herself, and sitting up late at night ; too frequent sexual intercourse. Her mind just after marriage is oftentimes too much excited by large parties, by balls and concerts.

The following are, moreover, frequent causes of a miscarriage : Falls ; all violent emotions of the mind, passion, fright, etc. ; fatigue ; over-reaching ; sudden shocks ; taking a wrong step either in ascending or in descending stairs ; falling down stairs ; lifting heavy weights ; violent drastic purgatives ; calomel ; obstinate constipation ; debility of constitution ; consumptive habit of body ; fashionable amusements ; dancing ; late hours ; tight lacing—indeed, anything and everything that injuriously affects either the mind or the body.

Long Railway Journeys.

We have enumerated above, that taking a long railway journey is one cause of a miscarriage. It certainly is a cause, and a frequent cause, of a miscarriage. It is dangerous, until she have quickened, for a pregnant woman to take a long railway journey, as it might bring on a miscarriage. It is also attended with great risk for a lady who is *enceinte*, two or three months before she expects her confinement, to undertake a long journey by rail, as it might induce a premature labor, which often comes on about the seventh month. This advice, of course, holds good with tenfold force if a lady be prone to miscarry, or to bring forth a child prematurely ; indeed, a lady predisposed either to miscarry or to bring forth prematurely, ought not, during any period of her pregnancy, to take a long railway journey, as it might be attended with disastrous consequences.

The old maxim that “prevention is better than cure” is well exemplified in the case of a miscarriage. Let us, then, appeal strongly to our fair reader to do all that she can, by avoiding the usual causes of a miscarriage which we have above enumerated, to prevent such a

catastrophe. A miscarriage is no trifling matter ; it is one of the most grievous accidents that can occur to a wife, and is truly a catastrophe.

Threatening or Warning Symptoms.

A lady about to miscarry usually, for one or two days, experiences a feeling of lassitude, of debility, of *malaise*, and depression of spirits ; she feels as though she were going to be taken “poorly ;” she complains of weakness and of uneasiness about the loins, the hips, the thighs, and the lower part of the belly. This is an important stage of the case, and one in which a judicious medical man may, almost to a certainty, be able to stave off a miscarriage.

If the above symptoms be allowed to proceed, unchecked and untended, she will, after a day or two, have a slight show of blood ; this show may soon increase to a flooding, which will shortly become clotted. Then, perhaps, she begins for the first time to dread a miscarriage. There may at this time be but little pain, and the miscarriage might, with judicious treatment, be even now warded off. At all events, if the miscarriage cannot be prevented, the ill effects to her constitution may, with care, be palliated, and means may be used to prevent a future miscarriage.

Decided Symptoms of a Miscarriage.

If the miscarriage be still proceeding, a new train of symptoms develop themselves ; pains begin to come on, at first slight, irregular, and of a “grinding” nature, but which soon become more severe, regular, and “bearing down.” Indeed, the case is now a labor in miniature ; it becomes *le commencement de la fin* ; the patient is sure to miscarry, as the child is now dead, and separated from its connection with the mother.

There are two stages of miscarriage—(1) the separation of the ovum from the womb, and (2) the expulsion of the ovum from the womb. The former, from the rupture of vessels, is necessarily attended with more or less of flooding ; the latter, in addition to the flooding, from the contraction of the womb, with more or less

of pain. Now, if there be separation, there must follow expulsion, as nature is doing all she can to get rid of the separated ovum, which has now become a foreign body; and if there be expulsion, there must, of necessity, be pain, as contraction of the womb invariably causes pain; hence there is, in every miscarriage, more or less of flooding and of pain; indeed, you cannot have a miscarriage without both the one and the other.

A sudden freedom, in a miscarriage, from flooding and from pain, often tell of the escape of the ovum from the womb; although the ovum may still be lodging in the vagina—the passage from the womb—but from thence it will readily and speedily, of its own accord, come away, and therefore there need, on that head, be no apprehension.

Period of Greatest Danger.

The most usual time for a lady to miscarry is from the eighth to the twelfth week. It is not, of course, confined to this period, as during the whole time of pregnancy there is a chance of premature expulsion of the contents of the womb. A miscarriage before the fourth month is at the time attended with little danger; although, if neglected, it may forever injure the constitution.

There is, then, in every miscarriage, more or less of flooding, which is the most important symptom. After the fourth month it is accompanied with more risk, as the further a lady is advanced in her pregnancy, the greater is the danger of increased flooding; notwithstanding, under judicious treatment, there is every chance of her doing well. A medical man ought in such a case always to be sent for. There is as much care required in a miscarriage as, or more than, in a labor.

If bearing down, expulsive pains—similar to labor pains—should accompany the flooding; if the flooding increase, and if large clots come away; if the breasts become smaller and softer, and if the milk (there having previously been a little in the bosom) suddenly dry up; if there be coldness and heaviness, and diminution in the size of the belly; if the motion of the child (the patient having quickened) cannot

be felt ; if there be the impression of a heavy mass rolling about the womb, or the falling of the uterine tumor from side to side in the abdomen as the patient changes her position, and if there be an unpleasant discharge, she may rest assured that the child is dead, and that it is separated from all connection with her, and that the miscarriage must proceed, it being only a question of time. Of course, in such a case—if she had not already done so—she ought immediately to send for a doctor. A miscarriage sometimes begins and ends in a few days—five or six ; at other times continues a fortnight, and even in some cases three weeks.

Treatment for Miscarriage.

If the patient have the slightest “ show,” she ought immediately to confine herself either to a sofa, or she should keep in bed. A soft feather bed must be avoided ; it both enervates the body and predisposes to a miscarriage. There is nothing better for her to sleep on than a horse-hair mattress. She either ought to lie flat upon her back, or should lie upon her side, as it is quite absurd for her merely to rest her legs and feet, as it is the back and the abdomen, not the feet and legs, that require rest.

Sexual intercourse should, in such a case, be carefully avoided ; indeed, the patient ought to have a separate bed—this is the most important advice, for if it be not followed, the threatened miscarriage will be almost sure to be an accomplished fact. Let her put herself on low diet, such as arrow-root, tapioca, sago, gruel, chicken-broth, tea, toast-and-water, and lemonade ; and whatever she does drink ought, during the time of the miscarriage, to be cold. Grapes at these times are cooling and refreshing.

The temperature of the bedroom should be kept cool ; and, if it be summer, the window ought to be thrown open. Aperient medicines must be avoided, and if the flooding be violent, cold water should be applied externally to the parts.

Let us strongly urge upon the patient the vast importance of preserving any and every substance that might come away, in order that

it may be carefully examined by the medical man. It is utterly impossible for a doctor to declare positively that a lady has really miscarried, and that all has properly come away, if he have not had an opportunity of examining the substances for himself. How often has a lady declared to her medical man that she has miscarried, when she has only parted with clots of blood. Clots sometimes put on strange appearances, and require a practiced and professional eye to decide at all times upon what they really are.

Utmost Care Required.

The same care is required after a miscarriage as after a labor; indeed, a patient requires to be treated much in the same manner—that is to say, she ought for a few days to keep her bed, and should live upon the diet we have recommended after a confinement, avoiding for the first few days stimulants of all kinds. Many women date their ill state of health to a neglected miscarriage; it therefore behooves a lady to guard against such a misfortune.

A patient prone to miscarry ought, before she becomes pregnant again, to use every means to brace and strengthen her system. The best plan that she can adopt will be to leave her husband for several months, and go to some healthy spot; neither to a fashionable watering-place, nor to a friend's house where much company is kept, but to some quiet country place—if to a healthy farm-house, so much the better.

Early hours are quite indispensable. She ought to be on a horse-hair mattress, and should have but scant clothing on the bed. She must sleep in a well-ventilated apartment. Her diet should be light and nourishing. Gentle exercise ought to be taken, which should alternate with frequent rest.

Cold ablutions ought every morning to be used, and the body should be afterwards dried with coarse towels. If it be winter, let the water be made tepid, and let its temperature be gradually lowered until it be used quite cold. A shower-bath is in these cases serviceable; it braces and invigorates the system, and is one of the best tonics she can use.

If she be already pregnant it would not be admissible, as the shock of the shower-bath would be too great, and may bring on a miscarriage; but still she ought to continue the cold ablutions.

A lady who is prone to miscarry ought, as soon as she is pregnant, to lie down a great part of every day; she must keep her mind calm and unruffled; she must live on plain diet; she ought to avoid wine and spirits and beer; she should retire early to rest, and she must have a separate sleeping apartment. She ought, as much as possible, to abstain from taking opening medicine; and if she be actually obliged to take an aperient—for the bowels must not be allowed to be constipated—she should select the mildest, and even of these she ought not to take a larger dose than is absolutely necessary, as a free action of the bowels is a frequent cause of a miscarriage.

Importance of Exercise.

Gentle walking exercise daily is desirable; long walks and horse exercise must be sedulously avoided. A trip to the coast, provided the railway journey be not very long, would be likely to prevent a miscarriage; although we would not, on any account, recommend such a patient either to bathe in or sail on the water, as the shock of the former would be too great, and the motion of the vessel and the seasickness would be likely to bring on what we are anxious to avoid.

As the usual period for miscarrying approaches (for it frequently comes on at one particular time), let the patient be more than usually careful; let her lie down the greatest part of the day; let her mind be kept calm and unruffled; let all fashionable society and every exciting amusement be eschewed; let both the sitting and the sleeping apartments be kept cool and well ventilated; let the bowels (if they be costive) be opened by an enema of warm water (if the external application of castor oil, as a linament, be not sufficient); let the diet be simple and yet nourishing; let all stimulants, such as beer, wine and spirits, be at this time avoided; and if there be the slightest symptoms of an approaching miscarriage, such as pains in the loins, in the hips, or in the lower abdomen, let a doctor be sent for.

CHAPTER XV.

LACTATION, OR NURSING.

Maternal Cares and Duties—Nursing a Pleasure to the True Mother—Nursing Natural and Healthy—Best Food for the Child—Ailments of the Breasts—Milk-Fever—Gatherings—Care of the Nipples—Outward Applications—Stated Times for Nursing—Danger of Overfeeding—Clothing for the Mother—What the Nursing Mother Should Eat—How Food and Drink Affect the Mother—Variety of Diet Recommended—Fits of Depression—Evils of Alcoholic Drinks—Benefits of Exercise—An Amiable Temper—Keeping Mind and Hands Occupied—Work a Grand Panacea—The Menses During Nursing.

MATERNAL cares and duties do not cease with labor, with the bringing forth of a child. The child must be started right, must have a good beginning to its endless career, and the mother is needed every moment during the tender years of infancy as well as during the later years of youth and coming maturity. A mother ought not, unless she intend to devote herself to her baby, to undertake to suckle him. She must make up her mind to forego the so-called pleasures of a fashionable life. There ought, in a case of this kind, to be no half-and-half measures; she should either give up her helpless babe to the tender mercies of a wet-nurse, or she must devote her whole time and energy to his welfare—to the greatest treasure that God hath given her.

If a mother be blessed with health and strength, and if she have a good breast of milk, it is most unnatural and very cruel for her not to suckle her child; on the contrary, it is a great satisfaction, and every true mother will so regard it. She will sympathize with these lines of the poet Rogers:

The hour arrives, the moment wished and feared;
The child is born, by many a pang endeared!
And now the mother's ear has caught his cry—
Oh! grant the cherub to her asking eye!
He comes—she clasps him; to her bosom pressed
He drinks the balm of life, and drops to rest.

A mother who is able to suckle her child, but who, nevertheless, will not do so, can have but little love for him ; and as indifference begets indifference, there will not be much love lost between them ; such a mother is not likely to look after her children, but leave them to the care of servants. Of such a family it may truly be said :

“ There children dwell who know no parent’s care ;
Parents who know no children’s love dwell there.”

If a mother did but know the happiness that suckling her babe imparts, she would never for one moment contemplate having a wet-nurse to rob her of that happiness. Lamentable, indeed, must it be, if any unavoidable obstacles should prevent her from nursing her own child. In his own felicitous way, Montgomery says :

’Tis sweet to view the sinless baby rest,
To drink its life-spring from her nursing breast ;
And mark the smiling mother’s mantling eyes,
While hushed beneath the helpless infant lies ;
How fondly pure that unobtruding prayer,
Breathed gently o’er the listless sleeper there !

Moreover, if a mother does not suckle her child herself, she is very likely soon to be in the family-way again : this is an important consideration, as frequent child-bearing is much more weakening to the constitution than is the suckling of children ; indeed, nursing, as a rule, instead of weakening, strengthens the mother’s frame exceedingly, and assists her muscular development. Those mothers who nurse and cherish their offspring are not only more truly mothers, but they have a double reward in that, while their children thrive and thus gladden their hearts, they themselves are also very materially benefited. No woman is so healthy as she who bears healthy children healthily.

If the young of animals were not suckled by their own mothers, what an immense number of them would die ; what an unnatural state of things it would be considered. And yet it is not at all more unnatural than for a healthy woman, with a good breast of milk, not to nurse, or only partially to nurse, her own babe. Were the suckling animal to deny her milk to her offspring, or to feed them with

any other sort of food ; were the feathered tribes to fail in gathering the natural food for their young, or to fail in taking it into their own stomachs, to adapt it to their digestive powers, and were the insect tribes to deposit their eggs in situations where their progeny could not find their natural food, or to fail in laying up with their eggs a store of nature's food, to be in readiness when they are hatched and brought forth ; were the instincts of nature to fail in these things, disease and death to the whole of these different classes of animals would most infallibly ensue ; each individual race would become extinct.

Nursing Is a Healthy Process.

A mother should remember, that if she be strong enough to become pregnant, to carry her burden for nine months, and at the end of that time to bear a child, she, as a rule, is strong enough to nurse a child. Suckling is a healthy process, and not a disease, and is, therefore, usually most beneficial to health. What, then, must happen if a mother does not nurse her infant? Disease must happen. For by so doing she violates the laws and institutions of nature, which cannot be done with impunity ; cannot be done without throwing the constitution into disorder and disease—into disease both general and local—swellings, inflammations and suppurations in the breasts, milk-fevers and milk-sores.

Besides, if a mother does not nurse her infant, her constitution is either so much injured that she becomes barren, or if this should not happen, she becomes pregnant again, and the injurious effects of frequent child-bearing without nursing are not to be told. The constitution may stand it out a while, but at last derangement of constitution and disease will come ; premature old age, and premature death. It is very cruel and most unnatural for a mother, if she be able, not to nurse her own child ; even the brute beasts, vile and vicious though they be, suckle their offspring :—" Even the sea monsters draw out the breast ; they give suck to their young ones ; the daughter of my people is become cruel, like the ostriches in the wilderness." So say the Scriptures.



FŒTUS AT NINE MONTHS, FULLY DEVELOPED.

Some old nurses recommend a mother to partly nurse and to partly feed a new-born babe. Now, this is a mistake; there is nothing like, for the first few months—for the first four or five—bringing up the child on the mother's milk, and on the mother's milk alone. After the first four or five months, if the mother should not have enough milk, then a little artificial food might be given. Ponder well, therefore, before it be too late, on what we have said—health of mother and health of babe, human life and human happiness are at stake, and depend upon a true decision.

The Breast and Its Ailments.

As soon as the patient has recovered from the fatigue of her labor—that is to say, in about four or six hours—attention ought, more especially in a first confinement, to be paid to breasts. In a first confinement there is, until the third day, but very little milk; although there is usually on that day, and for two or three days afterwards, a great deal of swelling, of hardness, of distention, and uneasiness of the breasts; in consequence of which, in a first confinement, both care and attention are needed.

Not only so, but there is frequently, at this time, a degree of feverishness; which, in some cases, is rather severe, amounting even to what is called milk-fever. Now, milk-fever, if circumspection and pains be not taken to prevent it, may usher in a bad gathered breast. If there be milk in the breasts, which may be readily ascertained by squeezing the nipple between the finger and the thumb, the infant should at first be applied, not frequently, as some do, but at considerable intervals, say until the milk be properly secreted, every four hours; when the milk flows, the child ought to be applied more frequently, but still at stated times.

The child ought never to be allowed to be put to the nipple until it be first satisfactorily ascertained that there be really milk in the bosom; neglect of this advice has caused many a gathered breast, and has frequently necessitated the weaning of the child.

To wash away any viscid mucus from the nipple, or any stale

perspiration from the bosom, let the breasts and the nipples, before applying the babe, be first sponged with a little warm water, and then be dried with a warm, dry, soft napkin ; for some infants are so particular, that unless the breasts be perfectly free from stale perspiration, and the nipples from dried-up milk, they will not suck. If after the above cleansing process there be any difficulty in making him take the bosom, smear a little cream on the nipple, and then immediately apply him to it.

If the breasts be full, hard, knotty, and painful, which they generally are two or three days after a first confinement, let them be well but tenderly rubbed every four hours, either with the best olive oil (a little of which should, before using it, be previously warmed, by putting a little of the oil, in a tea cup, on the hob by the fire) or with equal parts of olive oil and of *eau de Cologne*, which should be well shaken up in a bottle every time before it is used ; or with what is an old-fashioned but an excellent embrocation for the purpose, namely, with goose oil, or with camphorated oil. On the third day, more especially after a first confinement, the breasts are apt to become very much swollen, painful and distended. If such be the case, it might be necessary, for a few days, to have them drawn once or twice by a breast pump.

Applications for the Breast.

If the bosoms be more than usually large and painful, in addition to assiduously using the liniments that the doctor may prescribe, apply to the breasts, in the intervals, young cabbage-leaves, which should be renewed after each rubbing. Before applying them, the "veins" of the leaves should with a sharp knife be cut smooth—level with the leaf. It will require several, as the whole of the breast ought to be covered. The cabbage-leaves will be found both cooling and comforting. Each bosom should then, with a soft folded silk handkerchief, be nicely supported, going under each breast and suspending it ; each handkerchief should then be tied at the back of the neck—thus acting as a kind of sling to each bosom.

The patient ought not, while the breasts are full and uncomfortable,

o drink much fluid, as it would only encourage a larger secretion of milk. The size of the bosoms under the above management will in two or three days decrease, all pain will cease, and the infant will, with ease and comfort take the breast.

If the breasts are tolerably comfortable (which in the second and in succeeding confinements they probably will be), let nothing be done



MILK-DUCTS IN THE HUMAN MAMMA.

to them, except as soon as the milk comes, at regular intervals, applying the child alternately to each of them. Many a bosom has been made uncomfortable, irritable, swollen, and even has sometimes gathered, by the nurse's interference and meddling. Meddlesome nursing is bad, and we are quite sure that meddlesome breast-tending is equally so. A nurse, in her wisdom, fancies that by rubbing, by pressing, by squeezing, by fingering, by liniment, and by drawing, that

she does great good, while in reality, in the majority of cases, by such interference she does great harm.

Too Much Interference by Nurses.

The child will, in second and in succeeding confinements, as a rule, be the best and the only doctor the bosoms require. We are quite convinced, that, in a general way, nurses interfere too much, and that the bosoms in consequence suffer. It is, of course, the doctor's and not the nurse's province, in such matters, to direct the treatment; while it is the nurse's duty to fully carry out the doctor's instructions.

There is nothing, in our opinion, that more truly tells whether a nurse be a good one or otherwise, than by the way she manages the breasts. A good nurse is judicious, and obeys the medical man's orders to the very letter, while on the other hand, a bad nurse acts on her own judgment, and is always quacking, interfering, and fussing with the breast, and doing on the sly what she dare not do openly. Such conceited, meddlesome nurses are to be studiously avoided; they often cause, from their meddlesome ways, the breasts to gather.

Let the above advice be borne in mind, and much trouble, misery and annoyance might be averted. Nature, in the majority of cases manages these things much better than any nurse possibly can do and does not as a rule, require helping. The breasts are sadly too much interfered and messed with by nurses, and by nurses who are in other respects tolerably good ones. No; nature is usually best left alone: she works in secret, deftly and well, and resents interference—more especially in the cases we have just described. Nature, then, is generally best left alone. Nature is God's vicegerent here upon earth or, as Chaucer beautifully expresses it—

“Nature, the vicar of the Almighty Lord.”

Milk-fever, or Weed.

The lying-in patient is liable a few days—generally on the third day after her confinement—while the milk is about being secreted—to a feverish attack, called milk-fever, or weed, or ephemeral fever, and

ephemeral it truly is, as it lasts only twenty-four hours, or at most, unless some untoward mischief should intervene, forty-eight hours. It comes on like an ague fit, having its three stages—its cold stage, its hot stage and its sweating stage. There is usually accompanying it headache, and pains flying about the one or both the breasts, the back and the lower part of the belly.

The weed, on the due secretion of the milk, usually passes off leaving no damage in its track; yet, notwithstanding, it sometimes does leave injury behind, either in the womb or in the breast—causing, in some instances, a bad gathered bosom. The weed, therefore, requires great care and attention, both from the doctor and from the nurse—to ward off such a serious disease as a gathered bosom—as a gathering of the deep-seated structure of the breast undoubtedly is.

Stated Times for Suckling.

After the new-born babe is washed, he generally falls asleep, and sleeps on, if not disturbed, for several hours. It is not necessary to rouse him from his slumber to give him sustenance—certainly not; the mother's milk is not always ready for him; but as soon as it is he instinctively awakes, and becomes importunate, and cries until he is able to obtain it. Nature—beneficent nature—if we will but listen to her voice, will usually tell us what to do and what not to do. The teasing of a mother's breasts by putting the babe to them before there be milk, and the stuffing of a new-born infant with artificial food, are evils of great magnitude, and cannot be too strongly condemned.

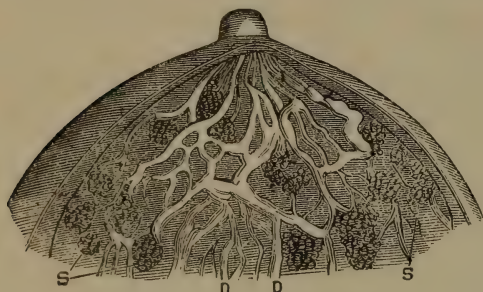
A mother ought to suckle her babe at stated times. It is a bad habit to give him the bosom every time he cries, regardless of the cause; for be it what it may—overfeeding, griping, “wind” or acidity—she is apt to consider the breast a panacea for all his sufferings. A mother generally suckles her infant too often—having him almost constantly at the bosom. This practice is injurious both to parent and to child. For the first month he should be suckled about every hour and a half, for the second month every two hours, gradually increasing, as he becomes older, the distance of time between, until at

length he has the breast about every four hours. If he were suckled at stated periods, he would only look for it at those times, and be satisfied.

Too Much Nursing.

A mother frequently allows her babe to be at the bosom a great part of every night. Now, this plan is hurtful both to her and to him; it weakens her, and thus enfeebles him; it robs them both of their sleep, and generates bad habits, which it will be difficult to break through; it often gives the mother a sore nipple and the child a sore mouth; it sometimes causes the mother to have a gathered breast, and fills the child with "wind."

It is surprising how soon an infant, at a very early age, may, by judicious management, be brought into good habits; it only requires, at first, a little determination and perseverance. A nursing mother, therefore, ought at once to commence by giving her child the breast at stated periods, and should rigidly adhere to the times above recommended.



SECTION OF HUMAN MAMMA.

S, S. Sacks. D, D. Ducts.

A mother should not, directly after taking a long walk, and while her skin is in a state of violent perspiration, give her babe the bosom; the milk, being at that time in a heated state, will disorder her child's bowels, or it may originate in him some skin disease, and one which it might be difficult to cure. She ought, therefore, before she give him the breast, to wait until the surface of her body be moderately cool, but not cold. Let her be careful the while not to sit in draughts.

A nursing mother ought to have her dress, more especially her stays, made loose and comfortable. A gathered breast sometimes arises from the bones of the stays pressing into the bosom; we should, therefore, recommend her to have the bones removed.

If a lady be not in the habit of wearing a flannel waistcoat, she ought at least to have her bosoms covered with flannel, taking care that there be a piece of soft linen over the nipples. We should advise a nursing mother to provide herself with a waterproof nursing apron, which may be procured either at any baby-linen establishment or at an india rubber store.

What the Nursing Mother Should Eat.

A nursing mother ought to live plainly; her diet should be both light and nourishing. It is a mistaken notion that at these times she requires extra good living. She ought never to be forced to eat more than her appetite demands; if she be, either indigestion, or heartburn, or sickness, or costiveness, or a bowel-complaint, will ensue. It is a folly at any time to force the appetite. If she be not hungry, compelling her to eat will do her more harm than good. A doctor in such a case ought to be consulted.

The best meats are mutton and beef; veal and pork may, for a change, be eaten. Salted meats are hard of digestion; if boiled beef, therefore, be eaten, it ought to be only slightly salted. It is better, in winter, to have the boiled beef unsalted; it is then, especially if it be the rump, deliciously tender. Salt, of course, must be eaten with the unsalted meat. High-seasoned dishes are injurious; they inflame the blood, and thus they disorder the milk.

Some persons consider that there is no care required in the selection of the food, and that a nursing mother may eat anything, be it ever so gross and unwholesome; but if we appeal to reason and to facts, we shall be borne out in saying that great care is required. It is well known that cow's milk very much partakes of the properties of the food on which the animal lives. Thus, if a cow feed on garlic, the milk and the butter will have a flavor of the plant. This, beyond a doubt, decides that the milk does partake of the qualities of the food on which she feeds. The same reasoning holds good in the human species, and proves the absurdity of a nursing mother being allowed to eat anything, be it ever so gross, indigestible, or unwhole-

some. Again, either a dose of purgative medicine given to her, or greens taken by her at dinner, will sometimes purge the babe as violently, or even more so, than it will the mother herself.

The Mother's Milk the Best.

Even the milk of a healthy wet-nurse acts differently, and less beneficially, upon the child than the mother's own milk. The ages of the mother and of the wet-nurse, the ages of her own and of the latter's infant, the constitution of one and of the other, the adaptability of a mother's milk for her own particular child—all tend to make a foster-mother not so desirable a nurse as the mother herself. Again, a mother cannot at all times get to the antecedents of a wet-nurse; and if she can, they will not always bear investigation.

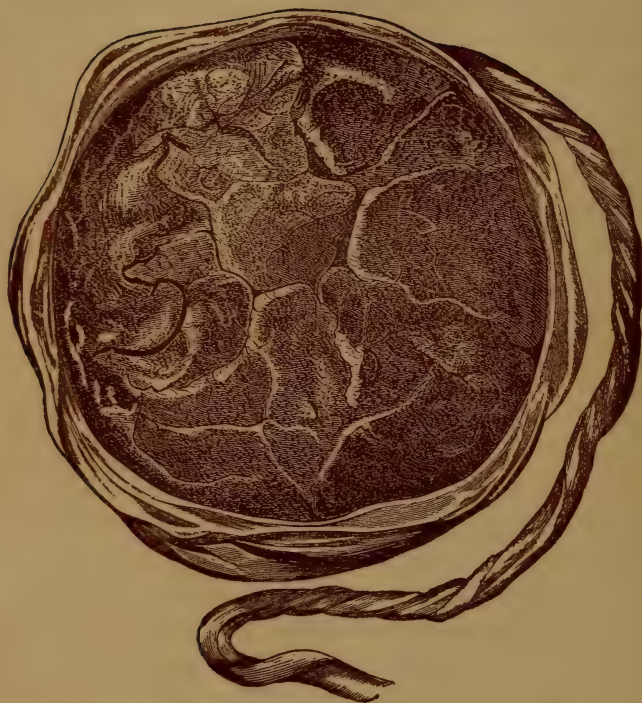
With regard to the ages of the mother and of the wet-nurse—for instance, as a wet-nurse's milk is generally a few weeks older than the mother's own milk, the wet-nurse's milk may, and frequently does, produce costiveness of the bowels of her foster-child; whilst, on the other hand, the mother's own milk, being in age just adapted to her babe's, may, and generally does, keep her own infant's bowels regular. The milk, according to the age of the child, alters in properties and qualities to suit the age, constitution, and acquirements of her baby—adapting itself, so to speak, to his progressive development; hence the importance of a mother, if possible, suckling her own child.

A babe who is nursed by a mother who lives grossly is more prone to disease, particularly to skin and to inflammatory complaints, and to disease which is more difficult to subdue. On the other hand, a nursing mother, who, although she lives on nourishing diet, yet simply and plainly, has usually the purest, as well as the most abundant, supply of milk.

Variety of Diet for the Mother.

Do not let us be misunderstood. We are not advocating that a mother should be fussily particular—by no means. Let her take a **variety** of food, both animal and vegetable; let her from day to day





UTERINE SURFACE OF THE PLACENTA (AFTERBIRTH).

vary her diet; let her ring the changes on boiled and stewed, on grilled and roast meats; on mutton and lamb and beef; on chicken and game and fish; on vegetables, potatoes and turnips; greens and cauliflower; on asparagus and peas (provided they be young and well-boiled), and Lima beans. The maxim of the greatest importance in reference to the materials of human food is mixture and variety—a maxim founded upon man's omnivorous nature. Animal and vegetable substances, soups and solid meat, fish, flesh, and fowl, in combination or succession, ought to form the dietary of every household

Common Sense the Best Guide.

But what we object to a nursing mother taking are: gross meats, such as goose and duck; highly-salted beef; shellfish, such as lobster and crab; rich dishes; highly-seasoned soup; pastry, unless it be plain; and cabbages and pickles, if found to disagree with the babe, and with any other article of food which is either rich, or gross or indigestible, and which, from experience, she has found to disagree either with herself or with her child. It will, therefore, be seen, from the above catalogue, that our restrictions as to diet are limited, and are, we hope, founded both on reason and on common sense, which ought to be the guides and councillors of every nursing mother, and of everyone else besides.

A nursing mother is subject to thirst; when such be the case, she ought not to fly either to beer or to wine to quench it; this will only add fuel to the fire. The best beverages will be either toast and water, milk and water, barley-water and new milk (in equal proportion), or black tea, either hot or cold; cold black tea is a good quencher of thirst.

Mental Depression and How to Treat It.

A lady who is nursing is at times liable to fits of depression. Let us strongly urge the importance of her abstaining from wine and from all other stimulants as a remedy; they would only raise for a time her spirits, and then would depress them in an increased ratio. Either a drive in the country, or a short walk, or a cup of tea, or a chat with a

friend, would be the best medicine. The diet should be good and nourishing ; plenty of bread and plenty of meat should be her staple food. A lady subject to depression should bear in mind that she requires nourishment, not stimulants—that much wine and spirits might cheer her for the moment, but will depress her afterwards.

Mischief-Making Doctors.

It is necessary to bear the above facts in mind, as there are many advocates who strongly recommend, in a case of this kind, a large consumption both of wine and of brandy. Such men are, at the present moment, doing an immense deal of mischief in the world ; they are, in point of fact, inducing and abetting drunkenness ; they are the authors of blighted hopes, of blasted prospects, of broken health, and of desolated homes. How many a wife owes her love of brandy, and her consequent degradation and destruction, to brandy having, for some trifling ailment, been at first prescribed for her. We maintain that it is highly dangerous to prescribe brandy to any patient, unless her case urgently demand it—unless it be, in point of fact, a case of life or death. It is emphatically playing with a deadly poison, tempting to evil, and courting disease, destruction, and death.

Spirits—brandy, rum, gin, and whiskey—are, during suckling, most injurious ; we may even say that they are to the parent, and indirectly to the child, insidious poisons. When an infant is laboring under an inflammatory complaint, a nursing mother ought not to take stimulants, such as either ale or wine. In a case of this kind, toast and water will, for her dinner, be the best beverage, gruel for her supper, and black tea—not coffee, as it would be too stimulating—both for her breakfast and tea.

Fresh Air and Exercise.

Outdoor exercise during suckling cannot be too strongly insisted upon ; it is the finest medicine both for babe and mother. Whenever the weather will admit, it must be taken. It is utterly impossible for a nursing mother to make good milk unless she do take an abundance of exercise, and breathe plenty of fresh air.

Whatever improves the health of the mother, of course, at the same time benefits the child; there is nothing more conducive to health than an abundance of outdoor exercise. It often happens that a mother who is nursing seldom leaves her house; she is a regular fixture, or like a cabbage that vegetates in one spot; the consequence is, both she and her babe are usually delicate and prone to sickness—it would, indeed, be strange if they were not. A mother ought not immediately after taking exercise to nurse her infant, but should wait for half an hour. Nor should she take violent exercise, as it would be likely to disorder the milk.

Carriage exercise, if the weather be hot and sultry, is preferable to walking; if that be not practicable, she ought to have the windows thrown wide open, and should walk about the hall, the landings and the rooms, as she would, by such means, avoid the intense heat of the sun. Although carriage exercise during intensely hot weather is preferable to walking exercise, yet, notwithstanding, walking must, during some portion of the day, be practiced. There is no substitute, as far as health is concerned, for walking. Many ailments that ladies now labor under could be walked away, and really it would be a pleasant physic—far more agreeable and effectual than either pill or potion.

An Amiable Temper.

Passion is injurious to the mother's milk, and consequently to the child. Sudden joy and grief frequently disorder the infant's bowels, producing griping, looseness, etc.; hence, a mother who has a mild, placid, even temper generally makes an excellent nurse, on which account it is a fortunate circumstance that she is frequently better-tempered during suckling than at any other period of her life; indeed, she usually, at such times, experiences great joy and gladness. The happiest period of a woman's existence is, as a rule, when she first becomes a mother: "The pleasure of the young mother in her babe is said to be more exquisite than any other earthly bliss."

It is an old, and, we believe, a true saying, that the child inherits the temper of his mother or of his wet nurse. This may be owing to

the following reasons : If the mother or the nurse be good-tempered the milk will be more likely to be wholesome, which will, of course, make him more healthy, and consequently better tempered. While, on the other hand, if the mother or the nurse be of an irritable, cross temper, the milk will suffer, and will thus cause disarrangement to his system ; and hence, ill-health and ill-temper will be likely to ensue. We all know the influence that good or bad health has on the temper. An important reason, then, why a nursing mother is often better tempered than she is at other times is, she is in better health, her stomach is in a healthier state :

“ A good digestion turneth all to health.”

Depend upon it, that after all that can be said on the subject it is a good stomach that makes both man and woman strong, and conduces so much to longevity ; if the stomach be strong there is a keen appetite and capital digestion, and in consequence of such a happy combination, good health and long life :

“ Now, good digestion wait on appetite,
And health on both ! ”

Inquire of your friends who are octogenarians, and you will almost invariably find that they have wonderfully strong stomachs, and, consequently, good appetites and splendid digestions. And if, perchance, they have severe illnesses, how surprisingly they pull through them. A good stomach, then, is much to be coveted, and demands both self-denial and consideration to insure one.

Dyspepsia and Melancholy.

Cheerfulness, too, is mainly owing to a good stomach ; a melancholic person is usually a dyspeptic, while a cheerful person is generally blessed with a good digestion ; it is the stomach, then, that has the principal making of a cheerful disposition. It is a moral impossibility for a dyspeptic to be either thoroughly happy, or contented, or cheerful ; while a good stomach will fill the possessor's heart with joy, cause the face to gleam with gladness, and thus

“ Make sunshine in a shady place.”

Hear what Shakespeare says of the functions of the stomach. The stomach is supposed to speak (and does it not frequently speak, and in a very unmistakable language, if we will but only listen to its voice?):

True is it, my incorporate friends, quoth he,
That I receive the general food at first
Which you do live upon ; and fit it is ;
Because I am the storehouse and the shop
Of the whole body. But if you do remember,
I send it through the rivers of your blood,
Even to the court, the heart—to the seat o' the brain ;
And through the cranks and offices of man,
The strongest nerves, and small inferior veins,
From me receive that natural competency
Whereby they live : And though that all at once,
You, my good friends, though all at once cannot
See what I do deliver out to each ;
Yet I can make my audit up, that all
From me do back receive the flower of all,
And leave me but the bran.

Occupation Strongly Recommended.

We strongly recommend a nursing mother to attend to her household duties. She is never so happy, nor so well, as when her mind is moderately occupied with something useful. She never looks so charming as when she is attending to her household duties. Says Milton :

For nothing lovelier can be found
In woman, than to study household good.

We do not mean by occupation the frequenting of balls, of routs, or of parties. A nursing mother has no business to be at such places ; she ought to devote herself to her infant and to her household, and she will then experience the greatest happiness this world can afford.

One reason why the poor make so much better nursing mothers than the rich is, the former having so much occupation, while the latter having no real work to do, the health becomes injured, and in consequence the functions of the breast suffer ; indeed, many a fashionable lady has no milk at all, and is, therefore, compelled to delegate to the bottle one of her greatest privileges and enjoyments.

A rich mother, who has no work to do, and who lives sumptuously, has frequently no milk, while the poor mother, who has to labor for her daily bread, and who has to live sparingly, has generally an abundance of milk. Luxury and disease, toil and health, go generally hand in hand together. The healthy breast of milk, then, frequently belongs to the poor woman, to the one whom

“The modest wants of every day
The toil of every day supplies.”

What would not some rich mother give for the splendid supply of milk—of healthy, nourishing, life-giving milk—of the poor woman who has to labor for her daily bread. What is the reason that wealthy ladies so frequently require wet nurses? The want of occupation! and from whom do they obtain the supply of wet nurses? From the poor women who have no lack of occupation, as they have to labor for their daily food, and have in consequence the riches of health, though poor in this world's goods:

“For health is riches to the poor.”

Bear this in mind, ye wealthy, and indolent, and pampered ladies, and alter your plans of life, or take the consequences, and still let the poor woman have the healthy, the chubby, the rosy, the laughing children; and you, ye rich ones, have the unhealthy, the skinny, the sallow, the dismal little old men and women who are constantly under the doctor's care, and who have to struggle for their very existence. Employment, which Galen calls “nature's physician,” is so essential to human happiness, that indolence is justly considered as the mother of misery.

Employment an Excellent Panacea.

Occupation, then—bustling occupation—real downright work, either in the form of outdoor exercise, or of attending to her household duties—a lady, if she desire to have a good breast of milk, must take, if in point of fact, she wish to have healthy children. For the Almighty is no respecter of persons. And he has ordained that work shall be the lot of man and of woman, too. It is a blessed

thing to be obliged to work. If we do not work, we have all to pay a heavy penalty in the form of loss of both health and happiness. "For work," says Carlyle, "is the grand cure of all the maladies and miseries that ever beset mankind—honest work, which you intend getting done."

A mother who is listless and idle, lolling the greater part of every day in an easy chair, or reclining on a sofa, in a room where a breath of air is not allowed to enter, usually makes a miserable and a wretched nurse. She is hysterical, nervous, dyspeptic, emaciated, and dispirited, having but little milk, and that little of a bad quality; her babe is puny, pallid, and unhealthy, and frequently drops into an untimely grave. Occupation, with fresh air and exercise, is indispensable to a mother who is suckling. How true it is that

"To be employed is to be happy."

While the converse is equally correct—to be idle is to be miserable.

No wife—more especially no nursing mother—can, then, by any possibility, be strong and well unless she have occupation; occupation is emphatically a necessity. "Nature has made occupation a necessity; society makes it a duty; habit may make it a pleasure."

"The Periods" During Suckling.

If a woman have "her periods" during suckling, she ought to have a separate bed; otherwise she will, in all probability, conceive, as she is more likely to conceive after "her periods" than when she has them not. This is important advice, for if it be not attended to, she may, in consequence of becoming pregnant, have to wean her child before he be old enough to be weaned. Besides, her own constitution might, in consequence of her having children too fast, be injured.

There is a notion abroad, that a mother who has "her periods" during suckling has sweeter, and purer, and more nourishing milk for her child; this is a mistaken idea, for really and truly such a mother's milk is less sweet, and pure, and nourishing; and well it might be, for the two processes of menstruation and of suckling cannot, without weakening the system, go on together.

CHAPTER XVI.

WEANING THE CHILD.

Best Time for Weaning—Effects of Prolonged Nursing—The Mother's Health to be Considered—Knock-kneed and Rickety Children—Weaning Gradually—Applications for the Nipples—Aloes and Wormwood—Drying up the Milk—Preparations for Reducing Full Breasts—Symptoms Denoting the Necessity of Weaning—Delicate Mothers—Return of the Menses—Wet Nurses—Inflammation and How to Treat It—Infectious Diseases—Stimulants to be Avoided.

THERE is an old saying, "that a woman should carry her child nine months, and should suckle him nine months." It is well known that the first part of the old adage is correct, and experience has proved the latter to be equally so. If a babe be weaned before he be nine months, he loses that muscular strength which the breast-milk alone can give; if he be suckled after he be nine months, he becomes pallid, flabby, weak, and delicate. It is generally recognized that the healthiest children are those weaned at nine months complete. Prolonged nursing hurts both child and mother; in the child, causing a tendency to brain disease, probably through disordered digestion and nutrition; in the mother, causing a strong tendency to deafness and blindness. It is a very singular fact, to which it is desirable that attention were paid, that in those districts of Scotland—namely, the Highlands and insular—where the mothers suckle their infants from fourteen to eighteen months, deaf-dumbness and blindness prevail to a very much larger extent among the people than in districts where nine or ten months is the usual limit of the nursing period.

The Time When an Infant Should be Weaned.

This, of course, must depend upon the strength of the child, and upon the health of the mother: nine months on an average being the proper time. If she be delicate, it may be found necessary to wean him at six months; or if he be weak, or laboring under any disease, it may be well to continue suckling him for twelve months; but after

that time the breast will do him more harm than good, and will, more over, injure the mother's health.

If he be suckled after he be twelve months old, he is generally pale, flabby, unhealthy, and rickety; and the mother is usually nervous, emaciated, and hysterical. A child who is suckled beyond the proper time, more especially if there be any predisposition, sometimes dies either of water on the brain, or of consumption of the lungs, or of mesenteric disease.

A child nursed beyond twelve months is very apt, if he should live, to be knock-kneed, and bow-legged, and weak-ankled—to be narrow-chested and chicken-breasted—to be, in point of fact, a miserable little object. All the symptoms just enumerated are those of rickets, and rickets are damaging and defacing to “the human form divine.” Rickets are a very common complaint among children—nearly all arising from bad management—from hygienic rules not being either understood or followed. There are many degrees of rickets, ranging from bow-legs and knock-knees to a crooked spine—to a humpback

How a Mother Should Wean Her Child.

She must, as the word signifies, do it gradually—that is to say, she should by degrees give him less and less of the breast, and more and more of artificial food; she ought at length only to suckle him at night, and lastly, it would be well for the mother either to send him away or to leave him at home, and for a few days go away herself.

A good plan is for the nurse to have in the bed a half-pint bottle of new milk, which, to prevent it from turning sour, had been previously boiled, so as to give a little to the child in lieu of the breast. The warmth of the body will keep the milk of a proper temperature, and will supersede the use of lamps, of candle-frames and other troublesome contrivances. If the mother be not able to leave home herself, or to send her child from home, she ought then to let him sleep in another room, with some responsible person—we say responsible person, for a babe must not be left to the tender mercies of a giggling, thoughtless, young girl.

If the mother, during the day-time, cannot resist having her child in the room with her, then we should advise her to make a pastry of aloes—that is to say, let her mix a little powdered aloes with a few drops of water, until it be of the consistence of paste—and let her smear a little of it on the nipple every time just before putting him to the breast; this will be quite enough for him, and one or two aloes applications to the nipple will make him take a disgust to the bosom; and thus the weaning will be accomplished. A mother need not be afraid that the aloes will injure her babe; the minute quantity he will swallow will do no harm, for the moment he tastes it, the aloes being extremely bitter, he will splutter it out of his mouth.

Bitter Applications for the Nipple.

Another application for the nipple to effect weaning is wormwood. There are two ways of applying it, either (1) by sprinkling a very small pinch of powdered wormwood on the nipple, or (2) by bathing the nipple with a small quantity of wormwood tea, just before applying the babe to it; either the one or the other of these plans will make him take a dislike to the breast, and thus the weaning will be accomplished. Wormwood is excessively bitter and disagreeable, and a slight quantity of it on the nipple will cause an infant to turn away from it with loathing and disgust; the wormwood, the minute quantity he will taste, will not at all injure him. Wormwood was in olden time, according to Shakespeare, used for the purpose of weaning:

And she was weaned,—I never shall forget it—
Of all the days of the year upon that day :
For I had then lay wormwood to my dug [nipple],
Sitting in the sun under the dove-house wall,
My lord and you were then at Mantua :—
Nay, I do bear a brain : but, as I said,
When it did taste the wormwood on the nipple
Of my dug, and felt it bitter, pretty fool !
To see it tetchy, and fall out with the dug.

The best way of “drying up the milk” is to apply to each breast soap-plaster, spread on soft pieces of wash leather, the shape and size of the top of a hat, with a round hole the size of a quarter in the

middle of each to admit the nipple, and with a slit from the centre to the circumference of each plaster to make a better fit. These plasters ought to be spread by a druggist.

When the child is once weaned, the breasts ought not to be drawn, as the drawing of them would cause them to secrete larger quantities of milk; if, therefore, the bosoms be ever so full or uncomfortable, a mother ought to leave them alone; she should wait patiently, and the milk will gradually diminish, and will at length disappear. The drawing of the bosoms during weaning, either by means of a breast-pump, or by the mouth, or by other like contrivances, has frequently caused gathered breasts. If not drawn they scarcely, if ever, gather.

A Good Preparation for Full Breasts.

The above plan of "drying up the milk" will generally, in five or six days, assuage the milk away; but if, at the end of three days, the bosoms still continue full and uncomfortable, the plasters should be removed, and the breasts ought, every four hours, to be well but tenderly rubbed with equal parts of olive oil and *eau de Cologne*; the nurse supporting the bosom, during such friction, with her other hand. Let us impress the above important advice on a nursing mother's mind; it might save a great deal of after suffering and misery.

It might be well to state, that after the child has been weaned the milk does not always entirely leave the breasts, not even for weeks, and, in some cases, not even for months; it is not of the slightest consequence, and requires no treatment to get rid of it.

A mother ought, during the period of weaning, to live abstemiously, and should drink as little as possible. In many cases it is necessary to work off the milk—to give every morning, for two or three mornings, mild aperient medicine, such as either a *Se. 'litz* powder, or a teaspoonful of magnesia, or a teaspoonful of Epsom salts in half a tumbler of warm water.

A mother sometimes cannot suckle her child, the attempt bringing on a train of symptoms somewhat similar to the following: singing in the ears, dimness of sight, aching of the eye-balls, throbbing in the

head, nervousness, hysterics, tremblings, faintness, loss of appetite and of flesh, fluttering and palpitation of the heart, feelings of great exhaustion, indigestion, costiveness, sinking sensations of the stomach, pains in the left side, great weakness and dragging pains of the loins, which are usually increased whenever the infant is put to the bosom, pallor of the countenance, shortness of breath, swelling of the ankles.

Every mother who is suffering from suckling does not have the whole of the above long catalogue of symptoms. But if she have three or four of the more serious of them, she ought not to disobey the warnings, but should discontinue nursing, although it might be necessary, if the babe himself be not old or strong enough to wean, to obtain a healthy wet-nurse to take her place.

Remember, then, that if the above warning symptoms be disregarded, dangerous consequences, both to parent and child, might and probably will be the result. It might either throw the mother into a consumption, or it might bring on heart disease; and, in consequence of his not being able to obtain sufficient or proper nourishment, it might cause the infant to dwindle and pine away, and, eventually, to die either of water on the brain or of atrophy.

Sudden Diminution of Milk.

If there be, during any period of suckling, a sudden and great diminution of milk in the breasts, the chances are that the mother is again *enceinte*; the child should, if she be pregnant, be either weaned or, if he be not old enough to wean, be supplied with a healthy wet-nurse. It is most injurious both to parent and to child for a mother, when she be pregnant, to continue suckling.

Soon after nine months' nursing "the monthly periods" generally return. This is another warning that the babe ought immediately to be weaned, as the milk will lessen both in quantity and in nourishment, and the child in consequence will become delicate and puny, and every day he is suckled will lose, instead of gain, ground. We have known many children become, from protracted suckling, smaller at twelve months than they were at nine months; and well they might

be, as, after nine months, the mother's milk usually does them harm instead of doing them good, and thus causes them to dwindle away.

At another time, although the above train of symptoms does not occur, and notwithstanding she may be in perfect health, a mother may not be able to suckle her babe. Such an one usually has very small breasts, and but little milk in them, and if she endeavor to nurse her child it produces a violent aching of the bosom. Should she disregard these warnings and still persevere, it might and most likely will produce inflammation of the breast, which will probably end in a gathering.

Symptoms Denoting the Necessity of Weaning.

When the nipples are, and, notwithstanding judicious treatment, persistently for some time continue very sore, it is often an indication that a mother ought to wean her babe. Long-continued, obstinate sore nipples frequently occur in a delicate woman, and speak in language not to be misunderstood, that the child, as far as the mother herself is concerned, must be weaned. Of course, if the infant be not old enough to wean, a wet-nurse, when practicable, ought to take the mother's place. If the above advice were more frequently followed than it is, gathered breasts, much suffering, and broken health would not so frequently prevail as they do now.

If a mother be predisposed to consumption; if she have had spitting of blood; if she be subject to violent palpitation of the heart; if she be laboring under great debility and extreme delicacy of constitution; if she have any of the above complaints or symptoms, she ought not on any account to suckle her child.

Great care and circumspection are required in the selection of a wet-nurse; her antecedents should be strictly inquired into; her own health, and that of her babe must be thoroughly investigated; the ages of her own child and that of the foster-babe should be compared, as they ought as nearly as possible to be of the same age.

If a nursing mother should, unfortunately, catch either scarlatina or small-pox, or any other infectious disease, the child must, imme-

fiately, be either weaned or transferred to a wet-nurse, or the babe himself will, in all probability, catch the disease, and will very likely die. Moreover, the mother's milk, in such a case, is poisoned, and, therefore, highly dangerous for a child to suck. We scarcely need say, that the babe must instantly be removed altogether away from the infected house—small-pox and scarlet-fever both being intensely infectious, and the younger the child—if he do take the infection—the greater will be his peril.

A mother sometimes suckles her child when she is pregnant. This is highly improper, as it not only injures her own health, and may bring on a miscarriage, but it is also prejudicial to her babe, and may produce a delicacy of constitution from which he might never recover ; indeed, it may truly be said, that an infant so circumstanced is always delicate and unhealthy, and ready, like blighted fruit, to dwindle and die away.

A mother when she is weaning her child should live very abstemiously ; she should avoid highly-spiced and rich dishes, and stimulants of all kinds ; she should drink very little fluid ; she should, as much as possible, be out of sight and hearing of her babe ; she should rub her breasts three times a day with warm camphorated oil. Once having weaned her child, she should not again put him to the bosom. If she should be so imprudent, she may not only disorder her child and bring on bowel complaint, but she may cause her own breasts to inflame and her nipples to be sore. The less the breasts are meddled with the better, except it be the rubbing of them with warm camphorated oil, or, as before recommended, the application of soap-plaster spread on wash-leather to each bosom.

CHAPTER XVII.

AILMENTS OF THE MAMMÆ, OR BREASTS.

Small Nipples—Bad Effects of Pressure on the Breasts—Nipple-Shields, and How to Use Them—Best Applications—Cracked Nipples—Poor Supply of Milk—Applying Friction to the Breasts—Gatherings, and How Treated—Correct Position in Nursing—Sources of Inflammation—Sucking an Empty Breast—Permanent Injuries—Shivering Fits—Fainting Spells—Mother Not Strong Enough for the Child—Aperients During Nursing—Virtues of Brown Bread—Practice of Eating Honey and Fruit Jams—Use of Tea and Coffee—Evils of Constantly Dosing with Medicine.

A GOOD nipple is important both to the comfort of the mother and to the well-doing of the child. One, among many, of the ill effects of stays and of corsets is the pushing-in of the nipples; sore nipples and consequent suffering are the result. Moreover, a mother thus circumstanced may be quite unable to suckle her infant, and then she will be severely punished for her ignorance and folly; she will be compelled to forego the pleasure of nursing her own children. Ladies who never wear stays have much better nipples, and more fully-developed bosoms; hence such mothers are more likely to make better nurses to their babes. There is no doubt that the pressure of the stays on the bosom tends both to waste away the gland of the breast (where the milk is secreted), and to cause the nipple either to dwindle or to be pushed in, and thus to sadly interfere with its functions. We would strongly advise every mother who has daughters old enough to profit by it, to bear this fact in mind, and thus to prevent mischief when mischief might be prevented, by not allowing them, when young, to wear corsets.

Treatment of Very Small and Drawn-in Nipples.

The babe ought to nurse through some good nipple-shield, approved by your doctor. We have known many mothers able to suckle their children with this invention, who otherwise would have been obliged either to have weaned them, or to have procured the

assistance of a wet-nurse. The above aid, in the generality of instances, will enable the infant to suck with ease. After this has for a time been used, the nipples will be so improved as to render the continuance of it unnecessary. Of course, we do not advise the use of the nipple-shield until a fair trial has been given by applying the babe at once to the nipple; but if he cannot draw out the nipple, then it ought, by all means, to be tried. Remember, as soon as the nipple be sufficiently drawn out, which, in all probability, it will be in a few days, the nipple-shield should be dispensed with.

If a lady, during the latter few months of her pregnancy, were to adopt "means to harden the nipples," sore nipples during the period of suckling would not be so prevalent as they now are. A sore nipple is frequently produced by the injudicious custom of allowing the child to have the nipple almost constantly in his mouth. "Stated periods for suckling," as recommended in a previous paragraph, ought to be strictly adopted. Another frequent cause of a sore nipple is from the babe having the thrush. It is a folly to attempt to cure the nipple, without at the same time curing the mouth of the infant.

An Excellent Remedy.

A good application is a liniment composed of equal parts of glycerine and of brandy (say a vial containing two drachms of each), which must be shaken up just before using. It should, by means of a camel's-hair brush, every time directly after the babe has been suckled, be painted on the nipple. A piece of either old soft cambric or lawn, about the size of the palm of the hand, snipped around to make it fit, ought then to be moistened in the glycerine and brandy, and should, whenever the child is not at the breast, be applied to each of the sore nipples, and worn until they are cured. These applications will be found of much service and of great comfort, and will act as nipple-shields—protecting and healing the nipples. A soft sponge of warm water should be gently applied to the nipples just before putting the child to the breast.

Sometimes the pure glycerine, without the brandy, painted on the

sore nipple does the most good; if, therefore, the glycerine and brandy does not succeed, the pure glycerine should be tried. There is nothing in the pure glycerine injurious to the child; it therefore need not, before applying the child to the breast, be wiped off.

Cracked and Fissured Nipples.

Sometimes the nipple is sore from having either cracks or fissures upon it. These cracks or fissures may attack any part of the nipple, but are very apt to form where the nipple joins the breast; and, when very severe, an ignorant nurse, who is always fond of dealing in the marvellous, declares that the child has nearly bitten the nipple off. Now, the best remedy for a cracked and fissured nipple is, for the infant, until the cracks and fissures are cured, to suck through the intervention of a nipple-shield; and every time, directly after the babe has been put to the nipple, to apply to the parts affected either neat brandy, or the glycerine and brandy liniment, or the pure glycerine.

Another cause of a sore nipple is from the mother, after the babe has been sucking, putting up the nipple wet. She, therefore, ought always to dry the nipple—not by rubbing it, but by dabbing it with either a soft cambric or lawn handkerchief, or with a piece of soft linen rag (one or other of which ought always to be at hand), every time directly after the infant has done sucking, and just before applying the liniment to the nipple.

Loss of Milk.

A nursing mother is sometimes annoyed by the milk flowing constantly away, making her wet and uncomfortable. All she can do under such circumstances is to wear nipple-shields, and to apply a piece of flannel to the bosom, which will prevent the milk from chilling her, and will thus do away with the danger of her catching cold, etc.

A mother ought, before applying the infant to the bosom, to carefully ascertain if there be milk. This may readily be done by squeezing the nipple between the finger and the thumb. If there be no milk, she must wait until the milk be secreted, or serious conse-

quences both to her and to the infant might ensue ; to the former, inflammation and gathering of the bosom and sore nipples ; to the latter, thrush, diarrhœa and eruptions on the skin.

If there be a supply of milk in the breasts, and if still the child will not suck, the doctor's attention ought to be drawn to the fact, in order that he may ascertain whether the babe be tongue-tied ; if he be, the mystery is explained, and a trifling, painless operation will soon make all right.

If the breasts be full and uneasy, they ought, three or four times a day, to be well, although tenderly, rubbed with olive oil and *eau de Cologne* (equal parts of each mixed in a vial). Some nurses rub with their fingers only. Now such rubbing does harm. The proper way to apply friction is to pour a small quantity of the oil and *eau de Cologne*—first shaking the bottle—into the palm of the hand, the hand being warm, and then to well rub the breasts, taking care to use the whole of the inside of the hand. After the breasts have been well rubbed, each ought to be nicely supported with a large, soft, folded silk handkerchief ; each handkerchief must pass under each breast and over the shoulders, and should be tied at the back of the neck, thus acting as a sling.

Gathered Breast.

A healthy woman with a well-developed breast and a good nipple scarcely, if ever, has a gathered bosom ; it is the delicate, the ill-developed breasted and worse-developed nipped woman that usually suffers from this painful complaint. And why ? The evil can generally be traced to girlhood. If she be allowed to be brought up luxuriously, her health and her breasts are sure to be weakened, and thus to suffer—more especially when the bosoms' and the nipples' development are arrested and interfered with by tight stays and corsets. The nipple is by them drawn in, and retained on a level with the breast—countersunk, as it were—as though it were of no consequence to her future well-being, as though it were a thing of nought.

Tight lacers will have to pay the penalties they little dream of,

Oh, the monstrous folly of such proceedings! When will mothers awake from their lethargy? It is high time that they did so. Many a home, from the mother having "no nipple"—the effects of tight lacing—has been made childless, from the babe not being able to procure its proper nourishment, and dying in consequence. It is a frightful state of things. But fashion, unfortunately, blinds the eyes and deafens the ears of its votaries.

A gathered or "bad breast," as it is sometimes called, is more likely to occur after a first confinement and during the first month. Great care, therefore, ought to be taken to avoid such a misfortune. A gathered breast is frequently owing to the carelessness of a mother in not covering her bosom during the time she is suckling. Too much attention cannot be paid to keeping the breast comfortably warm. This, during the act of nursing, should be done by throwing either a shawl or a square of flannel over the neck, shoulders and bosom.

Wrong Position in Nursing.

Another cause of gathered breasts arises from a mother sitting up in bed to suckle her babe. He ought to be accustomed to take the breast while she is lying down; if this habit be not at first instituted, it will be difficult to adopt it afterwards. Good habits may, from earliest babyhood, be taught a child.

A sore nipple is another fruitful cause of a gathered breast. A mother, in consequence of the suffering it produces, dreads putting the babe to it; she therefore keeps him almost entirely to the other breast. The result is, the breast with the sore nipple becomes distended with milk, which, being unrelieved, ends in inflammation, and subsequently in gathering.

Another cause, as before indicated, of a gathered breast is a mother not having a properly-developed nipple—the nipple being so small that the child is not able to take hold of it; indeed, the nipple is sometimes level with the other part of the bosom, and in some instances sunk even below the level of the breast, the patient having what is popularly called "no nipple"—that is to say, she having no

properly-developed nipple—a nipple not of the least use for any practical purpose whatever, but rather a source of pain and annoyance. The nipple, in some cases, never has developed; it is, from infancy to wifehood, at a perfect standstill.

How Inflammation is Produced.

With such a patient, when she becomes a mother, it is quite impossible that she can suckle her child. The child, in such a case, vainly attempts to suck, and the milk, in consequence, becomes “wedged,” as the old nurses call it, and inflammation ending in gathering is the result, and to crown all, the child is obliged to be weaned, which is a sad misfortune. But really, in a case of this kind, the child ought never to have been put to the breast at all.

The fruitless attempt of an infant to procure milk when there is little or none secreted, is another and frequent cause of a gathered bosom. Dr. Ballard, in his valuable little work, before quoted, considers this to be the principal cause of a gathered breast; and, as the subject is of immense importance, we cannot do better than give it in his own words, more especially as he has the merit of originating and of bringing the subject prominently before his professional brethren.

He says: “This (mammary abscess or gathered breast) is another form of disease entirely referable to the cause under consideration [fruitless sucking]. In the case last related, the formation of mammary abscess [gathered breast] was only just prevented by arresting any further irritation of the breast by suckling; and since I have kept careful notes of my cases, I have observed that in all instances of abscess there has been abundant evidence of a demand being made upon the gland for a supply of milk beyond that which it had the power of secreting.

Breast-Pumps and Exhausting-Bottles.

“If the child only has been kept to the breast, then it has suffered with disordered bowels; but in the majority of cases an additional irritation has been applied; the commonly-received doctrine, that a

turgid breast is necessarily overloaded with milk, leads mothers and nurses to the use of breast-pumps, exhausting-bottles, or even the application of the powerful sucking powers of the nurse herself, to relieve the breasts of their supposed excess; and it is this extraordinary irritation which, in the majority of cases, determines the formation of an abscess [gathering].

“Sometimes these measures are adopted to remove the milk when a woman is not going to suckle, and then an abscess not unfrequently is established. I have previously alluded to the mistake into which mothers and nurses are led by the appearance of a swollen breast: it is not evidence that the gland can secrete freely, and it is in this turgid state that the excessive irritation tells most severely. This hyperæmic [plethoric] condition seems to be a step towards inflammation, and the irritation supplies that which is wanting to complete the process. If a woman will only remove the child from the breast directly the act of sucking produces pain, she may be pretty sure to avoid abscess. So long as the milk can be obtained there is no pain.” The above most valuable advice deserves great attention, and ought to be strictly followed.

Two Forms of Gathered Breast.

How is a patient to know that she is about to have a gathered bosom? There are two forms of gathered breast; one being of vast, and the other of trifling importance. The first, the serious one, consists of gathering of the structure of the gland of the breast itself; the latter, merely of the superficial part of the bosom, and ought to be treated in the same manner as any other external gathering.

In the mild or superficial kind of gathered bosom, the mother may still persevere in suckling her child, as the secreting portion of the breast is not at all implicated in the gathering; but in the severe form, she ought not, on any account whatever, to be allowed to do so, but should instantly wean her child from the affected side. The healthy breast she may still continue to nurse from.

The important form of a gathered breast we will now describe: A severe gathered bosom is always ushered in with a shivering fit;

the more severe the gathering the longer is the shivering fit. Let this fact be impressed deeply upon our reader's mind, as it admits of no exception. This shivering is either accompanied or followed by sharp lancinating pains of the bosom. The breast now greatly enlarges, becomes hot, and is very painful. The milk in the affected bosom either lessens or entirely disappears. If the child be applied to the breast (which he ought not to be), it gives the mother intense pain. She is now feverish and ill; she is hot one minute, and cold the next—feeling as though cold water were circulating with the blood in her veins; she loses her strength and appetite, and is very thirsty; she feels, in point of fact, downright ill.

A Grave Symptom.

A doctor must, at the very onset of the shivering fit, be sent for; and he will, in the generality of instances, be able to prevent such a painful and distressing occurrence as a gathered breast. If twelve hours be allowed to elapse after the shivering has taken place, the chances are that the gathering cannot altogether be prevented, although, even then, it may, by judicious treatment, be materially lessened and ameliorated.

We sometimes hear of a poor woman suffering dreadfully for months, and of her having a dozen or twenty holes in her bosom. This is generally owing to the doctor not having been sent for immediately after the shivering; we, therefore, cannot too strongly insist, under the circumstances, upon a mother obtaining prompt assistance, not only to obviate present suffering, but, at the same time, to prevent the function of the breast from being injured, which it inevitably, more or less, will be if the important form of gathering be allowed to take place.

Permanent Injuries.

When once a lady has had the severe form of gathered breast she ought, in all subsequent confinements, to obtain, before suckling her babe, the express permission of the doctor to do so, or the nursing mother may have a return of the gathered breast, and the consequent

tant pain, misery, and annoyance. The reason of the above is obvious: the function of the breast, in a severe gathering, might be irreparably injured; so that, in all subsequent confinements, the very attempt of suckling again may, instead of inducing secretion of milk, set up inflammatory action, terminating in gathering of the breast.

Although it is not always prudent to suckle a babe where, in a previous labor, there had been a severe form of gathered breast, yet we have known instances where ladies have been able, after such gathering in a previous confinement, to nurse their children with comfort to themselves and with benefit to their children. Each individual case, therefore, must be judged on its own merits by a medical practitioner skilled in such matters.

Treatment for Exhaustion.

When a nursing mother feels faint, she ought immediately to lie down and take a little nourishment—either a crust of bread and some light stimulant, or a cup of tea with the yolk of an egg beaten up in it, either of which will answer the purpose extremely well. Brandy, or any other spirit, we would not recommend, as it will only cause, as soon as the immediate effects of the brandy are gone off, a greater depression to ensue; not only so, but the frequent taking of brandy might become a habit—a necessity—which would be a calamity deeply to be deplored.

A mother is sometimes faint from suckling her child too often, she having him almost constantly at the bosom. She must, of course expect, as long as she continues this foolish practice, to suffer from faintness. A nursing mother feeling faint is often an indication that the child is robbing her of her strength, and tells her, in unmistakable language, that she must give him, in addition to the breast milk, artificial food; or, if, notwithstanding the food, the faintness still continue, that she must wean him altogether. Warnings of faintness, during suckling, then, are not to be disregarded.

Strong purgatives during this period are highly improper, as they are apt to give pain to the infant, as well as to injure the mother. An

enema, either of warm water alone, or of gruel, oil and table salt, applied by means of a good self-injecting enema apparatus, is, in such a case, an excellent—indeed, the very best—method of opening the bowels, as it neither interferes with the digestion of the mother nor of the child.

The less opening medicine—whatever be the kind—a mother who is suckling takes, the better will it be both for herself and for her infant. Even castor oil, the least objectionable of aperients, should not be taken regularly during suckling ; if it be, the bowels will not be moved without it, and a wretched state of things will be established. No ; if the bowels will not act, an enema is by far the best remedy ; you can never do any harm, either to the mother or to the babe, by the administration of an injection ; it will neither induce future constipation, nor will it interfere with the digestion of the mother, nor with the bowels, nor with the health of the infant.

Virtue in Brown Bread.

When a lady who is nursing is habitually costive, she ought to eat brown instead of white bread. This will, in the majority of cases, enable her to do without an aperient. The brown bread may be made with flour finely ground all one way ; or by mixing one part of bran and three parts of fine wheaten flour together, and then making it in the usual way into bread. Molasses instead of butter on the brown bread increases its efficacy as an aperient, and raw should be substituted for lump sugar in her tea.

Either stewed prunes, or stewed French plums, is an excellent remedy to prevent constipation. The patient ought to eat, every morning, a dozen or fifteen of them. The best way to stew either prunes or French plums is the following : Put a pound either of prunes or of French plums, and two tablespoonfuls of raw sugar, into a brown jar, cover them with water, put them into a slow oven, and stew them for three or four hours. Both stewed rhubarb and stewed pears often act as mild and gentle aperients. Muscatel raisins, eaten at dessert, will oftentimes, without medicine, relieve the bowels.



DIGESTIVE TRACT, SHOWING THE SMALL INTESTINES.

In many cases honey—pure honey—is most welcome and beneficial to the human economy. It is recommended to be occasionally eaten in lieu of butter for breakfast. Butter, in some localities, and in some seasons of the year, is far from good and wholesome. One of the qualities of honey is, it frequently acts as an aperient.

A Corrective Diet.

The Germans are in the habit of eating for breakfast and for tea a variety of fruit jams instead of butter with their bread. Now, if the bowels be costive, jam is an excellent substitute for butter; and so is honey. The Scotch, too, scarcely ever sit down either to breakfast or to tea without there being a pot of marmalade on the table. American ladies, in this matter, may well take a leaf out of the books of the Germans and of the Scotch.

A tumblerful of cold spring water, taken early every morning, sometimes effectually relieves the bowels; indeed, few people know the value of cold water as an aperient—it is one of the best we possess, and, unlike drug aperients, can never by any possibility do harm. We beg to call a mother's especial attention to the fact of water being an admirable aperient for children; for if our views in the matter be, to the very letter, carried out, much drugging of children may be saved—to their enduring and inestimable benefit. But the misfortune of it is, some mothers are so very fond of quacking their children, that they are never happy but when they are physicking them. The children of such mothers are deeply to be pitied.

Effects of Tea and Coffee.

Coffee ought to be substituted for tea for breakfast, as coffee frequently acts as an aperient, more especially if the coffee be sweetened with brown sugar. We would strongly recommend a patient to eat a great variety of food, and to let the vegetable element predominate. Much meat encourages constipation. Fruit—Muscatel raisins especially—farinaceous food, coffee, and a variety of vegetables, each and all incite the bowels to do their duty.

Although a nursing mother ought, more especially if she be **costive**, to take a variety of well-cooked vegetables, such as potatoes, asparagus, cauliflower, French beans, spinach, stewed celery and turnips, she should avoid eating cabbages and pickles, as they would be likely to affect the babe, and might cause him to suffer from gripings, from pain, and "looseness" of the bowels.

The "wet compress" is an excellent method of opening the bowels. The way of applying it is as follows: Fold a large napkin a few thicknesses until it is about half a foot square; then dip it in cold water and place it over the bowels, over which apply either oil-skin or rubber cloth, which should be, in order to exclude the air, considerably larger than the folded napkin. It should be kept in its place by means of either a bolster case or a broad bandage; and must be applied at bed-time, and ought to remain on for three or four hours, or until the bowels be opened.

Avoid Constant Doses of Medicine.

Let us again—for it cannot be too urgently insisted upon—strongly advise a nursing mother to use every means in the way of diet, etc., to supersede the necessity of taking opening medicine, as the repetition of aperients injures, and that severely, both herself and child. Moreover, the more opening medicine she swallows, the more she requires; so that if she once get into the habit of regularly taking aperients, the bowels will not act without them. What a miserable existence to be always swallowing physic.

If a lady, then, during the period of suckling, were to take systematic exercise in the open air; to bustle about the house and to attend to her household duties; if she were to drink, the moment she awakes in the morning, a tumblerful of cold water; if she were to substitute brown bread for white bread, and coffee for tea at breakfast, and brown for white sugar; if she were to vary her food, both animal and vegetable, and to partake plentifully of some ripe fruit; if she were to use an abundance of cold water to her skin; if she were occasionally, at bed-time, to apply a "wet compress" to her bowels, and to visit

the water-closet daily at one hour ; if she were—even if the bowels were not opened for four or five days—not to take an aperient of any kind whatever, and avoid quacking herself with physic ; in short, if she would adopt the above safe and simple remedies—many of them being nature's remedies, and which are in the reach of all—she would not suffer, as she now does, as much from costiveness, which is frequently the bane, the misery, and the curse of her existence.

But then, to get the bowels into a proper and healthy state, it would take both time and trouble ; and how readily can a couple of pills be swallowed, and how quickly they act ; but how soon they have to be repeated ! until at length the bowels will not act at all unless goaded into action. The constant swallowing of opening pills, then, makes the bowels stubborn and sluggish, and wounds them unmercifully. The bowels, at length, will not, without the pills, move at all, and so the pills become a dire, and sometimes even a daily, necessity. Oh, the folly and the mischief of such a system !

CHAPTER XVIII.

DISEASES PECULIAR TO WOMEN.

Chlorosis, or Green Sickness—Symptoms and Treatment—Suppression of the Menses—Promoting the General Health—Fresh Air and Exercise—Pleasant Recreation—Profuse Menstruation—Causes and Treatment—Proper Diet—Best Tonics—Leucorrhœa, or Whites—Indications of Inflammation—Baths and Injections—Location of the Disease—Falling of the Womb—How Caused—Remedies—Change of Life—Peculiarities of the Transition—Inflammation of the Breasts—Remedies to be Employed—Heartburn, Etc.—Constipation of Pregnancy—Toothache During Pregnancy—Varicose Veins—Urinary Difficulties—Secretion of Milk—Milk Fever—Puerperal Fever.

CHLOROSIS, or green sickness, is a disease which occurs exclusively among females, chiefly between the ages of thirteen and twenty-four, seldom at a later period; if it does, it can be traced to secondary disturbances, such as confinements of young women, coming rapidly one after another, more especially if the women nurse their own children.

The disease sometimes breaks out previous to the first appearance of the menses, more frequently after several menstrual periods; as an entirely primary disease, it only breaks out among unmarried women. It is, in some degree, hereditary; females of a pale complexion are more liable to be attacked with it; though no constitution is exempt from the disease, although delicate individuals with irritable nerves are more susceptible to it. Among other causes, we may mention: insufficient exercise, mental exertions, without corresponding muscular activity; excitement of the fancy, especially when caused by novel reading; excitement of the sexual instinct by onanism, improper converse with the other sex; deprivation of the open air, and interference with the free expansion of the chest by tight dresses. Chlorosis is very commonly met with among daughters of a tuberculous or consumptive mother.

This disease generally comes on very slowly, the patients become more irritable, they are apt to get tired after every little effort, the

are liable to changes of color, the skin soon loses its bright lustre, and the patient complains of feeling chilly at an early period of the disease. Inasmuch as the disease may be characterized by a variety of symptoms, we will describe the derangements as they appear in each special organ and system.

External and Internal Symptoms.

The skin at times has the color of wax ; at other times it is rather yellowish, or of a dingy white, the veins being either not at all perceptible, or but indistinctly so ; the color of the cheeks may change quite often, within a very brief period of time. The visible mucous membranes are more or less without color. Swelling of the feet and limbs sometimes occur, but only in the highest grades of the disease.

The following symptoms occur in the digestive range : impaired appetite, aversion to meat, longing for strange articles of diet, such as vinegar, chalk, coffee, beans ; bloating of the stomach after every meal, sourness of the stomach, and generally the bowels are very torpid.

In the nervous system we discover excessive irritability, neuralgia, hysteric symptoms, fitful mood. The breathing is accelerated, the least physical exertion causes dyspnœa (shortness of breath), sometimes to a very high degree. The circulation is accelerated, very seldom retarded ; disposition to palpitations of the heart, which are easily excited by a physical effort. The menses are irregular, sometimes entirely suppressed, or very tardy, sometimes more profuse than usual, but always of a lighter color, or even quite colorless.

Heart Weakness and Palpitation.

Accompanying these symptoms are pains of the most diversified kind, very generally uterine catarrh. The urine has a strikingly pale color. The patients generally sleep very soundly, and have to sleep a long time, though sleep never refreshes them.

One or the other of these derangements is generally wanting. The one characteristic symptom is never absent : dyspnœa and palpitation

of the heart from the least unusual effort, especially after going up stairs.

The course of chlorosis is always more or less protracted, sometimes very chronic. If no particular disturbances take place, the affection can sometimes be cured in a few weeks; whereas, if the mode of living which had acted as the exciting cause is persevered in, the trouble may continue for years. The disease is most commonly more violent in summer than in the winter season. Uncomplicated chlorosis always terminates in recovery.

Among the complications, the simultaneous presence of consumption and scrofula are most threatening. We generally find that scrofulous girls who are attacked with chlorosis recover their health to some extent for a year or two, after which they die of consumption, or phthisis may set in as a direct development of a protracted chlorosis.

Treatment Recommended.

The leading remedies which have been found most useful in this affection are Pulsatilla, Sepia, Bryonia, Sulphur, Calcarea carb., Ferrum, Lycopodium, and Plumbum.

Pulsatilla is peculiarly useful in chlorosis, when the derangement seems to have been excited by, or is connected with, indigestion; and it is accompanied with headache, particularly in the side of the head, with shooting pains extending to the head and teeth, sometimes shifting suddenly to the other side; sallow complexion, difficulty of breathing, and sense of suffocation after the slightest movement; palpitation of the heart, coldness of the hands and feet, often changing to sudden heat; disposition to diarrhoea and leucorrhoea, pains in the loins, sensation of weight in the abdomen, almost constant chilliness and shivering, spasms in the stomach, with nausea; inclination to vomit, and vomiting; hunger, with repugnance to food; swelling of the feet and ankles, great fatigue, especially in the legs. This medicine is particularly adapted to females of mild disposition, disposed to be sad and tearful. *Dose*: Six pills every evening.

Sepia is a remedy of very great value in this disease when there is

a good deal of headache ; sallow complexion, with dark colored spots ; frequent colic and pain, as if arising from bruises in the limbs, with a drawing, tearing pain in the thick muscles of the back part of the legs. It may follow Pulsatilla, with great advantage, or be given in alternation with that remedy. *Dose* : Six pills or a powder every morning.

Bryonia. Frequent congestion of the head and chest, bleeding at the nose, dry cough, coldness and frequent shivering, sometimes alternating with dry and burning heat, constipation or colic, bitter taste in the mouth, tongue coated yellow, sense of pressure in the stomach, as if from a stone.

Sulphur is more particularly indicated when there is pressive and tensive pain in the back of the head, extending to the nape of the neck ; humming in the head, pimples on the forehead and round the mouth ; pale and sickly complexion, with red spots on the cheeks ; changeable appetite, with general emaciation : heaviness in the stomach, under the lower ribs and in the abdomen ; bowels irregular, great tendency to take cold, irritability and inclination to be angry, redness and melancholy, with frequent weeping. *Dose* : Six pills every other day.

Calcareæ Carb. is often of the most striking benefit in chlorosis. Sometimes a complete cure is effected by it alone, even in the worst cases, with (œdema) swelling of the extremities, and extreme dyspnoea. When there is complication with tubercular diathesis, accompanied by cough, Sulphur and Calcareæ Carb. often prove highly beneficial in alternation, or if oppressive headache is complained of, Sepia may be given in alternation. Sometimes menstruation does not take place for some time afterwards, though the general health is very much improved under the employment of the remedies prescribed. *Dose* . Six pills every morning.

This disease should receive prompt, careful and persevering treatment. It is dangerous only by reason of what it suggests respecting the general state of the system and the presence of other and worse ailments.

SUPPRESSION OR DELAY OF THE MENSES.

This suppression either takes place during the flow, or in consequence of causes acting previous to the actual appearance. In the former case a cold may have operated ; or cold washing may be the cause, or the feet may have got chilled, or the patient may not have been sufficiently protected by her clothes ; mental or moral emotions, vexations, chagrin, anger, fright, or dancing, sexual intercourse, dietetic transgressions may have led to the suppression.

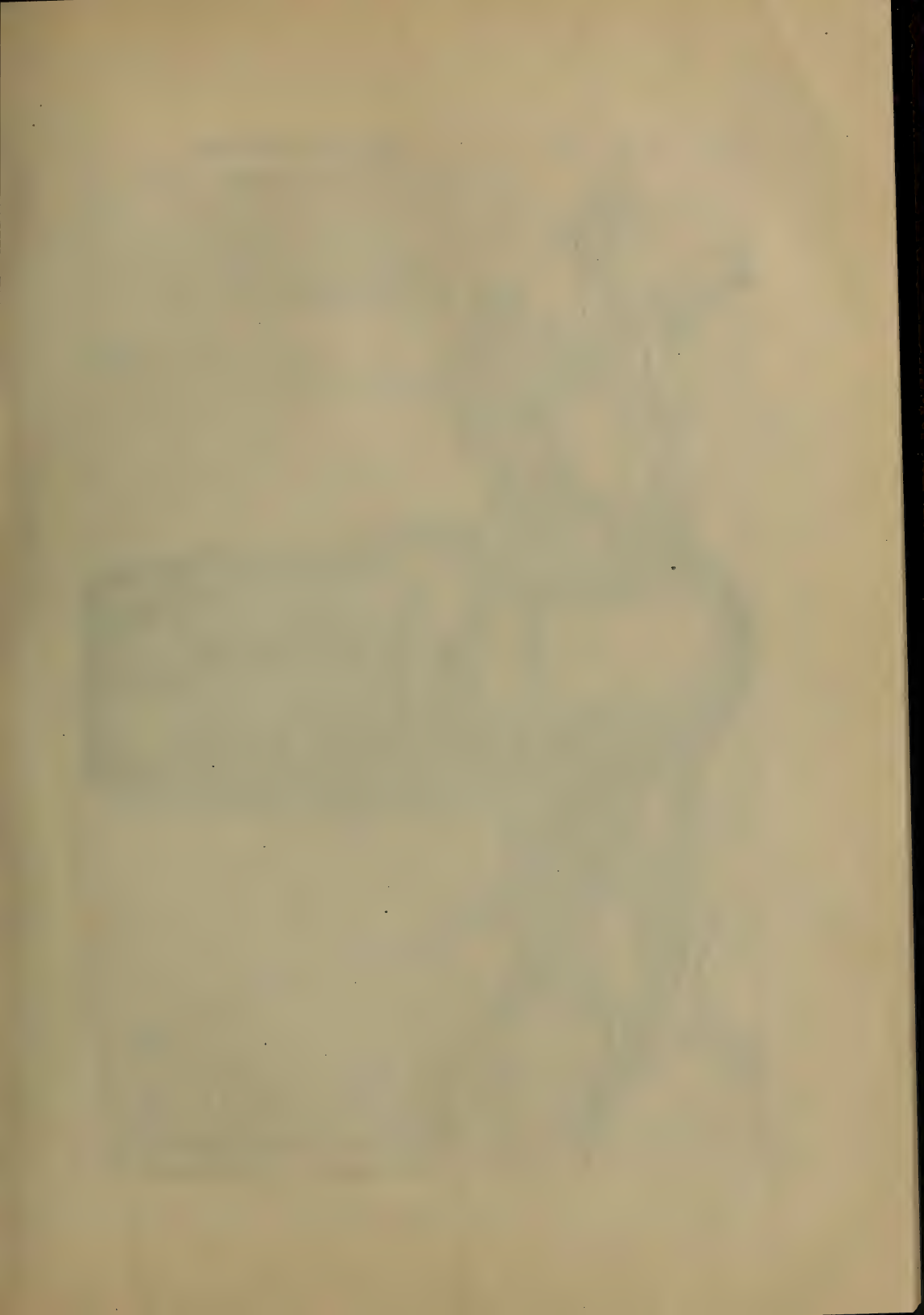
Most of these causes, if operating shortly before the time when the menses were to come on, may cause their retention. A gradual suppression of the catamenia may take place in consequence of deficient nutrition, as well as of the abuse of warm beverages.

The more sudden the suppression of the menses, the more violent the changes arising from such an occurrence. Some of the most prominent symptoms are : Violent headache, great anxiety and oppression of breathing, nose-bleed, spitting of blood, congestions of the head, heart, and lungs, and the like. In some cases, a suppression of this kind gives rise to acute uterine catarrh.

If a physician is called in time, he will, of course, inquire what gave rise to the trouble, and will seek to remove the consequences of fright, mortification, anger, etc., by appropriate specific remedies. If the physician is not called until some time after the morbid symptoms have existed, the aforesaid remedies will no longer be applicable, and the constitutional condition generally will have to be acted upon by corresponding remedies, and you should follow the same course as a physician.

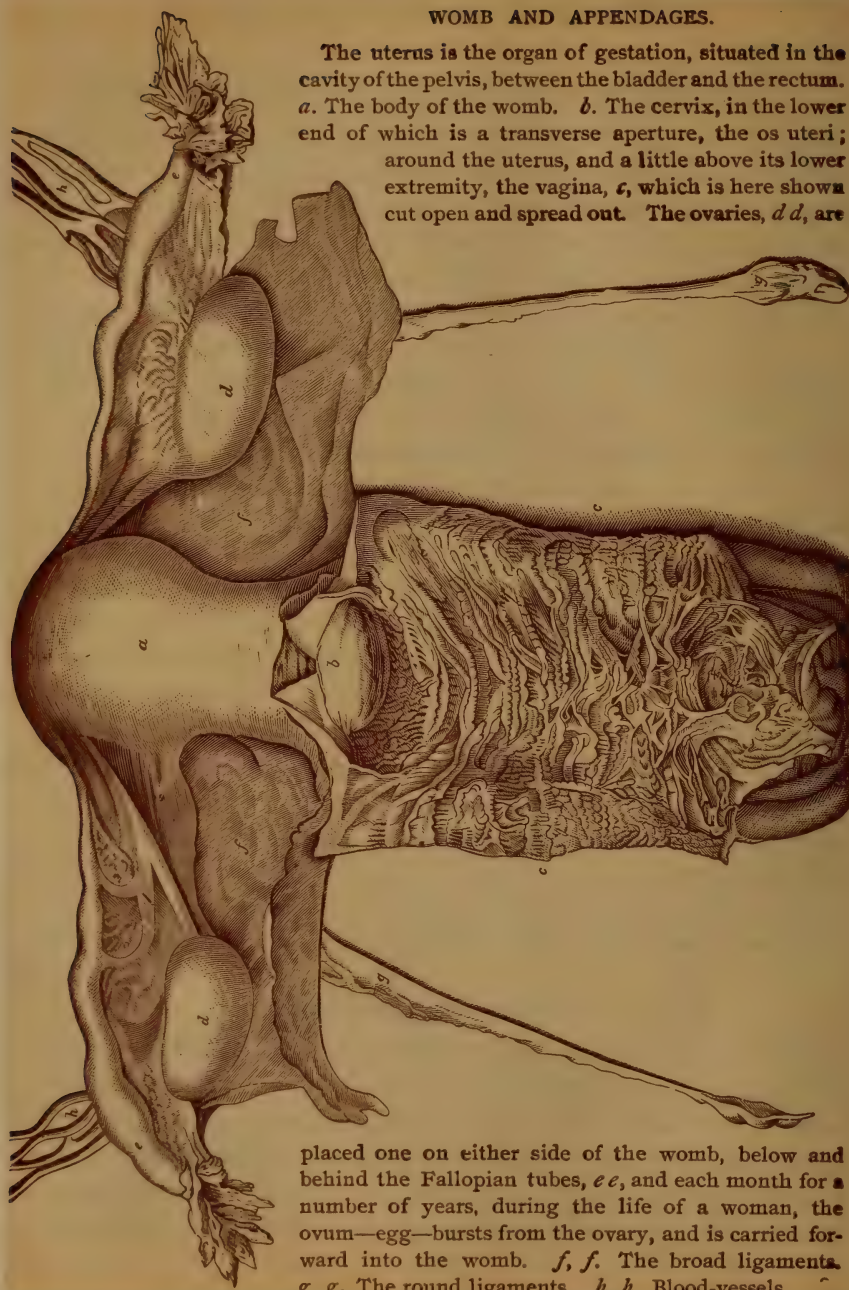
The Best Treatment.

If the menstrual flow (menses) never has appeared, and the patient is strong and healthy, and there is no menstrual molimen (symptoms or sensations of menstruation), it is not prudent to resort to any interference. Every means should be employed to strengthen and invigorate the system. The body, rather than the mental faculties, should be exercised. Life in the open air, and tonics containing iron, should



WOMB AND APPENDAGES.

The uterus is the organ of gestation, situated in the cavity of the pelvis, between the bladder and the rectum. *a*. The body of the womb. *b*. The cervix, in the lower end of which is a transverse aperture, the os uteri; around the uterus, and a little above its lower extremity, the vagina, *c*, which is here shown cut open and spread out. The ovaries, *d d*, are



placed one on either side of the womb, below and behind the Fallopian tubes, *c c*, and each month for a number of years, during the life of a woman, the ovum—egg—bursts from the ovary, and is carried forward into the womb. *f, f*. The broad ligaments. *g, g*. The round ligaments. *h, h*. Blood-vessels.

be given, if the patient is anæmic (having thin blood.) Consumption should be corrected as directed in the treatment of that disease. The preparations containing Aloes are especially appropriate.

Scarcely ever is menstruation (and menstrual sensation) absent after nineteen or twenty years, unless there is a lack of development in some of the organs of generation. This is to be inferred, if invigorating measures, after employment for some time, have proved ineffectual. The advice of a skillful physician should be always procured. Development of the womb to a proper size has, in some cases, been induced by treatment.

Retention of the menses is probable when regular symptoms of menstruation occur without the flow, and the abdomen of the patient gradually enlarges. The cause of retention may be absence of the vagina, an imperforate hymen or closure of the mouth of the womb. These may be overcome by the skill of the surgeon.

Bracing Up the General Health.

If the general health is good, and the generative organs, vagina, uterus and ovaries are well, or reasonably developed, iron may be efficacious in establishing the menstrual flow.

Persons who have amenorrhœa (suppression of menstruation) are generally suffering from an indisposition of some kind, with which the amenorrhœa is associated, or dependent upon. In some cases, the patient has fallen into ill health before the menses have ever appeared, and, as a consequence, there is no attempt at menstruation.

It is, therefore, perfect nonsense to attempt to bring on the monthly flow, or cure the amenorrhœa, while the general health remains impaired. In a patient suffering from consumption, treatment ought not to be directed to menstruation at all, until the patient can be brought up to a good degree of general health, and then nature will establish the menses, if the system is able to sustain the discharge. It is a popular error that stoppage of the monthly courses is the cause of the ill-health which accompanies it, whereas, exactly the opposite is the truth; the general indisposition has caused the suppression of the

menses. In the treatment of these cases, the return of the monthly sickness is the final result to be attained. Improvement in other respects must be first attained, and, almost always, the rest will follow as a necessity under nature's order alone.

Pure Air and Exercise.

If the patient is not surrounded by good hygiene, this is the first point to attain. She should have pure air, and exercise out of doors should be taken. This exercise, if taken for exercise, is apt to be neglected, and not be of a character which will make her of cheerful spirits; recreations, such as buggy riding, and walking with cheerful companions, or rambles in the fields or woods, will accomplish this, if not carried to a point which is fatiguing.

When the patient becomes exhausted at her exercise, she is going a little too far. A sedentary occupation may sometimes need to be changed for a more active one. With persons who are unaccustomed to physical exercise, this habit must be cautiously and gradually begun.

With shop and factory girls, poor hygiene is most likely to be the cause of such a poor state of health as will produce amenorrhœa. In these cases, while the use of medicines follows the same rules as in other debilitated patients, it is quite secondary to the improvement of their hygienic circumstances.

In schools, too little time is given to unrestrained life (exercise) in the open air, and too much time to quiet mental work, and the anxiety of parents as to the intellectual development of their children, leading them to send them to school at too early an age, and crowding them too rapidly, is a prolific source of ill-health, and consequent amenorrhœa. If parents would not send their children to school until they were eight years old, and, then, if a large portion of the day was appropriated by every student, to take such recreations as her inclinations lead her to, the breaking down and ill-health in schools for girls would be as rare as it is now common, provided eight full hours of the twenty-four were regularly spent in sleep.

The importance of exercise is admitted, in theory, in these schools, but the amount is not regulated to the wants of each particular case. The long walk may be beneficial to the strong and well-nourished, if they are accustomed to such exercise. The girls, not so strong and well-fed, may, in these very walks, lay the foundation for a serious disease. To make exercise most useful it must be pleasurable, and for that end restraint must be thrown off. Again, exercise ought not to be violent. The gymnasium is productive of good, if not carried to an extreme. It may do much harm. Such exercises as jumping are not to be indulged; occasional and moderate horseback riding is good, but carried to an extreme, it may do harm.

Early hours, good nourishing food, of which animal food forms a large part, plenty of fresh air and warm clothing are necessary to ensure good health, both before and after menstruation.

The constipation and derangement of the digestive organs is generally an effect of the state of ill-health, which is to be corrected, in the first place, before the patient can take such an amount of nourishment as will bring her body to a vigorous state, and maintain it there. Two or three Compound Rhubarb pills at night, followed by a Seidlitz Powder, or a dessertspoonful of Rochelle Salts in Lemonade in the morning may be given once or twice a week for a time; or after the bowels have moved freely from the use of three or four Compound Cathartic Pills, remedies may be used as are directed for constipation. The pills containing Aloes and Extract of Nux Vomica are to be preferred.

The Rough Towel and Warm Clothing.

The circulation should be maintained by free, pleasurable exercise in the open air, sponging the skin with tepid or cool water, and rubbing briskly with a coarse or rough towel, until the skin is aglow, and warm clothing. It is very important to keep the feet, legs and arms so well clothed that they will keep warm.

The two remedies which are especially serviceable in building up the health to a point at which menstruation will occur in obedience to

nature alone are Iron and Quinine. One of the best forms for its efficacious administration is the Citrate of Iron and Quinine in doses of from two to five grains three times a day. It may be dissolved in Syrup of Ginger or Orange Flower water. Take of Citrate of Iron and Quinine from one and a half to three drachms, Syrup of Ginger six ounces. Mix. *Dose*: A teaspoonful, or a teaspoonful and a half, three times a day.

If the bitter taste is seriously objected to, one or two grain pills of the Sulphate of Quinine may be given two or three times a day, and the same quantity of the Soluble Citrate of Iron may be given in solution with Cinnamon or Orange Flower water in the same proportions as directed for the Citrate of Iron and Quinine.

Before buying the sugar or gelatine coated pills of Quinine one of these should be cut open with a knife; if they are good they will be soft under the coating.

Another Mode of Treatment.

Pulsatilla should be employed when a suppression takes place from the sudden effects of a chill, when the symptoms generally correspond with those described under the head of that remedy, in the article on Chlorosis. *Dose*: Six pills in a teaspoonful of water, night and morning, for a week (unless a change should sooner occur); then pause eight days, after which the course may, if necessary, be repeated as before, and so on.

Cocculus in cases in which there are habitually attacks of colic-like pains in the bowels at the periods at which the menstrual discharge should occur if it were regular, more especially if the patient complains of great weakness of the lower extremities, languor and lassitude, precarious appetite, and generally also nausea, with much oppression at the chest and in the region of the stomach, etc.; especially when this functional derangement occurs in full-habited and apparently healthy persons, particularly if the suppression be traced to mental emotions. *Dose*: As for *Pulsatilla*.

Belladonna should be employed in cases which are associated with

fullness of blood, determination of blood to the head, violent throbbing of the arteries of the head and neck, and nose-bleed. *Dose*: As directed for *Pulsatilla*.

PROFUSE MENSTRUATION.

The quantity of the menstrual discharge varies a great deal in different individuals. The climate, constitution, and manner of living, have considerable influence. The duration of the discharge, and the periods of return, are also varied. In some women it continues from four to ten days, while in others it lasts only a few hours; from three to six days is, however, the most usual period. The regularity is, in many cases, exact to a day, or even an hour; while in others, a variation of several days is a usual occurrence, without the slightest disturbance in the usual health resulting therefrom.

An excess of loss of menstrual blood, a true menorrhagia, does not occur as often as it may seem to those who complain of it. To constitute menorrhagia, several circumstances have to occur that require to be carefully discriminated. The average of discharged blood has to exceed the ordinary loss quite considerably; and then, again, we have to inquire whether the scantiness of the ordinary menstrual flow is not an abnormal diminution in the present case.

The menstrual flow is likewise considered too copious if it continues beyond the ordinary period, although this need not necessarily imply that the menses are profuse. It is, therefore, the morbid character of the menses that is necessary to determine the disorder, for a copious flow of the menses cannot be considered abnormal as long as the constitutional harmony is in no respect disturbed by it.

The Common Causes.

The causes of profuse menstruation are quite numerous, of which it may be best to make mention of a few: Excess is occasioned by onanism, novel-reading, a constant dwelling of the fancy upon sexual things, and the habitual use of heating beverages. A few other important points have to be added: Under certain circumstances, a pro-

fuse flow of the menstrual blood becomes a real physiological necessity to the body ; for instance, if a larger supply of nourishment than the body requires for its normal support, causes a real plethora. This can hardly be regarded as a morbid condition. A profuse flow is sometimes occasioned by changes in the uterus, such as acute or chronic inflammation of the womb, or some foreign growth in the uterine cavity. Nursing exerts a very particular influence. As a rule, nursing women do not menstruate ; yet it may happen, even in the case of quite healthy mothers, that the menses reappear again permanently, in which case the flow is often very profuse. This is not a normal condition, although it does not inconvenience all women.

Treatment for Profuse Menstruation.

Ippecacuanha is one of the more generally useful medicines in severe cases of this derangement, as well as in flooding after labor, and may, in most instances, be administered first, unless there are strong indications for a preference being given to any of the others. *Dose* : Six globules in a teaspoonful of water, repeated at intervals of six hours, until amelioration or change.

Nux Vomica is especially appropriate for the following symptoms : The discharge being of too frequent occurrence, too profuse, and of too long duration ; and when it commonly stops for a day or so and then returns, attended with spasms in the belly ; sometimes nausea and fainting, especially in the morning ; pains in the limbs, restlessness, irascibility. **Nux Vomica** is especially serviceable when the above symptoms occur in females who are addicted to the daily or frequent use of coffee, liquors, and other stimulants, or have been extensively drugged by unwise practitioners. *Dose* : Six globules in a teaspoonful of water, repeated at intervals of four hours.

Gelsemium is indicated in cases in which there is scarcely an interval between the periods ; which are not, however, attended with much suffering ; or, the flow having ceased, is brought on again by fright or other mental emotion. *Dose* : Three globules.

Patients who are habitually affected with excessive menstrual dis-

charge should live with great regularity, keeping early hours, taking regular, but moderate, daily exercise in the open air (during the intervals) in favorable weather, and partaking of nothing but the most digestible, simple, and unstimulating diet, which, at the same time, should be of a nourishing and strengthening description. Emotions of all kinds should be avoided as much as possible; and during the continuance of the discharge the semi-recumbent posture should be retained, and the body kept cool. Neither food nor drink should be taken hot; the food should be as cool as it can be relished, or chiefly cold, and the beverage quite cold.

Other Remedies Employed.

The successful treatment of profuse menstruation will depend on the exact recognition of the profuse menstruation, and the use of appropriate means for effecting their removal. For this reason, if for no other, the skill of a physician is required to secure such a knowledge of the causes of the trouble as will lead to intelligent and proper treatment.

The general condition of the patient is to be looked after. If the blood is impoverished, the patient must be invigorated, and the general health improved by good hygiene, good food, pure air, and exercise, carried to the point of making the patient feel vigorous, never fatigued, etc. If the patient resides in a malarious locality, anti-malarial treatment will be required, as two or three grains of Quinine three or four times a day, or a larger dose once or twice a day for a few days or a week, followed by such directions as are given in the treatment of ague. The use of iron, as directed in the treatment of anæmia and ague, is generally necessary. If the bowels are torpid and inactive, they should be moved by a brisk cathartic, and during the day of the menstrual flow, a mixture of Epsom Salts and Aromatic Sulphuric Acid should be given, as:

Take of Epsom Salts an ounce, Aromatic Sulphuric Acid half an ounce, Syrup three and a half ounces. Mix. *Dose*: A teaspoonful to a dessertspoonful, in water, four times a day.

In cases due chiefly to debility, a half a drachm of Sulphate of Iron may be added to the above formula. The dose will be the same, given three times a day. Two or three times a week a laxative pill may be taken, such as are directed for constipation, if the bowels are not sufficiently active. The chronic congestion of the uterus requires attention when this exists, which is always the case in those instances not dependent on organic disease. The warm vaginal douch, as directed for leucorrhœa, is useful. Tonics are also required which contain Quinine, Iron, and Strychnine, as :

Take of Citrate of Iron and Quinine, and of the Citrate of Iron and Strychnine, each a drachm and a half; Water of Orange Flowers four ounces. *Mix. Dose:* A teaspoonful three times a day.

This medicine may be sweetened with the addition of sugar or substituting Syrup of Orange.

Derangement of the Womb.

Many a case of profuse menstruation depends upon a flexion of the womb. It is astonishing sometimes, how quickly the excessive flow will cease when this displacement is corrected. Hence the necessity of securing the services of a careful doctor, who can trace out the cause and apply the proper remedy.

A chronic inflammation of the womb, resulting from sub-involution of the womb (its failure to regain its natural size after confinement or miscarriage), may cause this trouble. The most suitable constitutional treatment appears to be the daily use of the hot douche, and hot hip-bath, and rest much of the time in the reclining posture. The tonic recommended for chronic congestion is suitable, with three or four doses a day of half a teaspoonful of Fluid Extract of Ergot. If, after this treatment has been continued through a whole interval, between times of menstruation, without benefit, it will be well to try Iodide of Potassium instead of Strychnine, as in this formula :

Take of Elixir of Cinchona and Pyrophosphate of Iron eight ounces, and add Iodide of Potassium five drachms. *Mix. Dose:* A teaspoonful to a dessertspoonful three times a day.

LEUCORRHŒA—WHITES.

Simple catarrh is one of the most common derangements of the female sex. It originates in a variety of causes. In the first place, we have to mention as exciting causes, such as act directly upon the sexual organs—excessive coition and self-abuse, miscarriage, and to some extent confinements, which, if occurring in too rapid succession, almost always cause leucorrhœa, especially when, after the last-named causes, the patient persists in getting about too soon.

The influence of cold, damp weather, or exposure to cold and damp from the location of the residence in a marshy district, or perhaps the nature of the house itself (stone, with walls constantly moist on their inner surface), and from water standing in the cellar, especially when long continued, is a powerful promoter of leucorrhœa.

Symptoms of Inflammation.

An entire opposite, but not less numerous class of causes of this disease, may be found in the high living, stimulating spices, condiments, and drinks in which many women indulge.

At the first appearance of leucorrhœa, there are usually the indications of acute inflammation, pain, heat, and redness of the parts involved which may subside as the discharge becomes more and more fully developed. With this discharge, whether acute or chronic, there will usually be more or less pain in the groins and hypogastrium (lower part of the abdomen), and in the lower part and small of the back. The urethra will often become implicated, causing painful micturation (passing water) in the acute form, and sometimes causing almost inability to urinate.

How this Disease Should be Treated.

The treatment of leucorrhœa, or whites, must necessarily be directed first to the cause, as failure of the general health, as from consumption or anæmia (impoverishment of the blood). The treatment will relate primarily to the treatment of consumption, with which this ailment is so frequently and closely associated: directions will be given in the article on consumption; or, if the

patient is anæmic (pale, weak and tired, especially tired upon rising after a full night's rest), the treatment will first be directed to the removal of the anæmic condition, by the use of tonic remedies, especially iron.

When the discharge is very profuse and exhausting, the Phosphate or Hypophosphite of Lime may be given with great advantage. During the general improvement of the body, the discharge diminishes. The Compound Syrup of the Hypophosphites (Lime, Soda, Potash and Iron), meets the indications, and is agreeable to take. The dose is from a teaspoonful to a dessertspoonful, three times a day. If there are colicky pains or symptoms of dysentery, the Hypophosphites should be combined with Dilute Phosphoric Acid. Take of the Compound Syrup of Hypophosphites seven ounces, Dilute Phosphoric Acid one ounce. Mix. *Dose*: One or two teaspoonfuls three times a day.

The kind and quantity of food should be regulated to meet the wants of the system. Sleep should be long and undisturbed. The skin must be kept warm with flannels, bathing, rubbing and out-door exercise.

Baths and Injections.

The bath should, as a rule, be warm and tepid, taken daily, and followed immediately by cool bathing. The combined sitz and sponge bath is most generally applicable; after the bath the skin should be rubbed until it is aglow. If there is a poor reaction or no reaction, the cool bath should not be used. Some are most benefited by the warm baths exclusively.

While many cases of leucorrhœa can be cured without them, injections are very valuable in treating this trouble, and sometimes they are a necessity. A long, flexible syringe, having a long vaginal tube, should be selected, and used after the form called the "douche." The syringe should be filled and one end of the tube introduced into the vagina, and the other in the bucket containing the fluid, which is raised considerably higher than the patient. The tube acts as a siphon. The height of the bucket and the length of this column of

fluid governs the force of the current. The flexible tube should, therefore, be long.

In this way, any quantity of fluid can be used at an injection without wearying the patient. She should lie upon her back, with her hips raised with a pillow, and a rubber cloth so arranged that the fluid may be conducted into a bucket. In the use of water injections, we have found warm water (as hot as can be borne) the best. The quantity allowed to flow through the vagina should be large—one or two gallons, frequently repeated. Sometimes the cold douche alternated with the hot douche, and less often the cold douche alone, gives better results.

The Seat of Disease.

The diseased surface is not generally the vagina, but the interior of the womb, which medicated injections do not reach. They are often, however, useful. The simple water injection should be used first, followed by a quart of the medicated injection. A strong tea of White Oak Bark, with or without the addition of one or two teaspoonfuls of Alum in the quart may be used. One or two drachms of Tannin and four drachms of Alum to a quart of water is often serviceable. One or two even teaspoonfuls (drachms) of Sulphate of Zinc in a quart of water may be used. It is often better to change the injection from time to time. If the flow is offensive, the Permanganate of Potash, two drachms to the quart, or one drachm of Carbolic Acid to the quart of water, may be used for an injection. If the discharge is irritating, bathing the external genitals with a solution of Soda or Borax will be useful.

A Second Mode of Treatment.

The radical cure of this disorder is attended with much difficulty, and can only be effected by long, patient and careful treatment in those cases in which it is incidental to serious derangements of the womb, or of its appendages.

Pulsatilla is indicated when the discharge is thick, like cream, or milky, and sometimes gives rise to a burning sensation; when, more-

over, it is associated with indigestion, and occurs in females of relaxed fibre and lymphatic temperament, or in whom the monthly flow is irregular and scanty; the discharge is often worse when lying down. *Dose*: Six globules in a teaspoonful of water, morning and evening, for four days (unless a decided change should sooner occur); then pause four days, after which the course may, if necessary, be repeated as before, and so on.

Sepia should be selected when the affection occurs in delicate and exhausted females, the discharge being yellow or green, generally watery, and more or less acrid or corrosive; and when it is accompanied by a tendency to profuse perspiration, particularly on sitting down, after walking. Sepia is, also, additionally indicated, if the monthly discharges are irregular; and, further, when bearing-down is often experienced. *Dose*: Four globules.

China should be given when the discharge is very profuse, and gives rise to great debility; the menses seem to be suspended, or the leucorrhœal discharge occurs instead; painful pressing towards the groins and anus. *Dose*: Four globules, as directed for *Pulsatilla*.

Æsculus-hip (Buckeye) is indicated where the whites are accompanied by intense pain and lameness in the back and hips, so that it is almost impossible to rise after sitting, or to walk a long distance; constipation, and piles. *Dose*: Three globules, as directed for *Pulsatilla*.

Podophyllum should be administered in cases in which the discharge is thick and transparent, and there is constipation, and a feeling of bearing, or pressing downwards on the genitals; falling of the womb, and protrusion of the intestine during stool. *Dose*: Three globules, as directed for *Pulsatilla*.

Collinsonia is indicated by cases in which the discharge, which may be thick or thin, is accompanied by great itching of the parts; and there are obstinate constipation, and disordered and painful menstruation. *Dose*: Three globules, as directed for *Pulsatilla*.

Iodium may be found very useful in cases of long standing, particularly in scrofulous subjects; the whites are most abundant at 6,

near the time for the menstrual flow; and the discharge is so very acrid and corrosive that not only are the adjacent parts made sore, but the underclothing is made rotten and destroyed. *Dose*: Six globules.

The diet ought to be simple, but generally very nutritive. Coffee and tea ought to be avoided, and cocoa or arrowroot substituted. Regular exposure to the benign influence of the fresh air is commendable, but over-fatigue and prolonged standing should be sedulously avoided.

PROLAPSUS UTERI—FALLING OF THE WOMB.

This is one of the most common forms of uterine displacement. It occurs in three distinct, different degrees, to each of which some writers on the subject have affixed a different name. Thus, relaxation, or simple descent of the womb, is understood to indicate the first and least displacement downward, and to consist only in a simple bearing-down of the womb upon the upper portion of the vagina. In *prolapsus uteri*, the organ comes still lower down, and may present itself at the orifice of the vagina.

In *procerdentia uteri* there is actual protrusion of the organ, even the entire body of the womb being, in some cases, extended from the vulva. These are but different degrees of descent of the uterus in the line of the vagina. Upon examination of the same displaced uterus, at different times of the day, it may be found to be more or less prolapsed, according to the condition of active exercise, or quiet, in which the parts may have been for some hours previous.

Primary Symptoms.

The principal and primary symptoms of the descent of the womb are: dragging and aching pains in the small of the back, pulling and bearing-down pains in the lower part of the abdomen, sensation as if something would issue from the vagina; sufferings much worse from walking, or other exercise; the pains are often noticed to have come immediately after some exertion of an unusual kind, and after some

more than ordinary muscular effort ; frequent calls to urinate, dysuria (painful urination), or even retention of urine.

In the more fully developed forms of prolapsus, the history of the case, the attendant circumstances, and the external appearance of the mouth of the womb, and even of the entire body of the uterus itself, can hardly fail to render the diagnosis at once easy and certain. And if the falling of the womb is not so far developed as to give any such external signs, the severe aggravation from walking and from lifting, together with the relief experienced from lying down, render the case sufficiently clear. Should there be any doubt, however, the vaginal touch will verify the diagnosis.

Causes of the Falling of the Womb.

Prolapsus of the womb may arise from various causes, such as over-lifting or some other muscular exertion, or from an improper manner of dress, such as tight lacing, or the weight of heavy clothing dragging on the abdomen. In case of married women who have borne children, many cases of falling of the womb are caused by mismanagement.

Perhaps the bandage worn has been too tight, or has slipped up and the pressure has forced the bowels to press down upon the womb while in a relaxed condition, or, perhaps, the patient has gotten up from the bed too soon after confinement ; the whole system being weak, it is very easy to do a little too much, and bring on injuries which are very often hard to relieve one's self of. In cases of displacement of the womb, the recumbent posture is a necessary requirement, together with the properly selected remedy ; a cure can very frequently be obtained.

Treatment.

Belladonna. Pressure, as though all the contents of the abdomen would issue through the genital organs. This is particularly felt early in the morning ; sensation of heat and dryness in the vagina. Pain in the pelvic region, which come on suddenly and cease suddenly, or

feeling in the back as if it would break, hindering motion, suppression of the stool and of urine.

Chamomilla. Frequent pressure toward the uterus, like labor pains, with frequent desire to urinate, often passing large quantities of colorless urine. Frequent discharge of clotted blood, with tearing pain in the veins of the legs, and violent labor-like pains in the uterus. Contrary to her condition in health, she is always out of humor, particularly at her menstrual periods, when she is headstrong, even unto quarreling. She can hardly speak a pleasant word, and has to restrain herself in order to do so.

China. In cases where the prolapsus and attendant symptoms were superinduced by losses of fluids, particularly of blood. She has much ringing in the ears, a sense of distention in the abdomen, which is not relieved by eructations.

Nux Vom. Prolapsus uteri, from straining by lifting. Pressure toward the genital organs, early in the morning, in bed, or during a walk, with a sensation of drawing in the abdomen. Constipation of large, hard, difficult stools, or small stools, with frequent urging. Pain in the small of the back, preventing her from turning over in bed. Frequent urination; she passes little, and often, with much burning pain. The prolapsus of long standing is often accompanied with dry cough, and a sense of constriction around the lower part of the abdomen.

THE CHANGE OF LIFE—MENOPAUSE.

After a certain number of years, woman lays aside those functions with which she has been endowed for the perpetuation of the species, and resumes once more that exclusively individual life which had been her's when a child. The evening of her days approaches, and if she has observed the precepts of wisdom, she may look forward to a long and placid period of rest, blessed with health, honored, yes, loved with a purer flame than any which she inspired in the bloom of youth and beauty.

But ere this haven of rest is reached, there is a crisis to pass, which

is ever the subject of anxious solicitude. The more common and less scientific name for it is the change of life; physicians know it as the menopause—the period of the cessation of the monthly flow. It is the epoch when the ovaries cease producing any more ova, and the woman becomes, therefore, incapable of bearing any more children.

The age at which this occurs is variable. In this country, from forty to forty-six years is the most common, though instances are not at all unusual where it does not take place until the half century has been turned, and we have known instances where women past sixty have continued to have their periodical returns.

An Infallible Index of the Approaching Change.

Examples of early cessation are more rare. We rarely meet them earlier than thirty years, but healthy women have been observed in whom the flow had ceased as early as twenty-eight.

The physical change which is most apparent at this time is the tendency to grow stout. The fat increases as the power of reproduction decreases. And here a curious observation comes in. We have said that when a girl changes to a woman a similar deposit of fat takes place (though less in amount), which commences at the loins. This is the first sign of puberty. In the change of life, the first sign is visible at the lower part of the back of the neck, on a level with the bones known as the cervical vertebra. There commences an accumulation of fat, which often grows to form two distinct prominences, and is an infallible index of the period of a woman's life.

The breasts do not usually partake of this increase, but become flat and hard, the substance of the gland losing its spongy texture. The legs and arms lose their roundness of outline, and where they do not grow fat, they wither up and resemble those of the other sex. The abdomen enlarges, even to the extent, occasionally, of leading the wife to believe that she is to be a mother—a delusion sometimes strengthened by the absence of the monthly sickness. Finally, a perceptible tendency to a beard often manifests itself, the voice grows harder, and the characteristics of the female sex become less distinct

In proportion as women enjoy good health, and especially in proportion as the menses are normal in quantity, and regular in their return, may we expect to pass through the trying season of the change of life at about the usual age, or a little later, and with comparatively little suffering, while in proportion as the health has been poor, and especially at the time of puberty, and the menses have been imperfect and irregular, shall we have reason to apprehend that the change of life will be, indeed, a critical period, and that it will require all the care and skill that can be employed to go through it in safety, and with health improved, instead of being rendered much worse.

For the change of life, once well passed, the woman settles down with a new form of life, and it may be with a new lease of life, and has a right to look forward to a happy old age. It is gratifying to know that nearly all the threatening affections of the change of life can be avoided by such hygienic care as one can render themselves, as they depend upon causes under the control of the individual.

Symptoms of the Change of Life.

These vary in different individuals according to their respective temperament; for in this, as well as in other conditions, women present the plethoric (full of blood), the chlorotic or nervous type. Thus, in those of the plethoric type, the symptoms will resemble those of congestion; there may be flushes of heat, rush of blood to the face and head, uterine and other hemorrhages, leucorrhœa, and even diarrhœa. In those of the chlorotic type, the symptoms which, at or near the proper age, would indicate the approach of the change of life, are the sallow complexion, weak pulse and various other indications of debility.

In those of a nervous type there is, as the change approaches, an evident disturbance of the equilibrium, not unlike that which, in similar cases, precedes the monthly flow. Hence, the over-anxious look, the brimful eye, the terror-struck expression, as if apprehensive of seeing some frightful objects, the face bedewed with perspiration, and the remarkable tendency to hysteria, sometimes to be met with.

In many cases, the change of life comes on so gradually, that the system accommodates itself to the new order of things with no shock to the nervous system, and without disturbing the accustomed harmony of the general circulation. In such cases, the intervals between the menstrual periods become more and more prolonged, and even the menstrual discharge itself may gradually diminish in quantity. The most frequent, and least dangerous symptom, is an irregular return of the menstrual flow every week, or every two or three weeks, or every two, three or four or six months, and being more or less irregular as regards quality or quantity of menstrual blood.

Alarming Flooding.

Serious and alarming hemorrhages frequently set in, especially among plethoric and nervous women, or such as have indulged in sexual excesses. Sometimes these hemorrhages alternate with whitish or yellowish leucorrhœa, which often has a fœtid smell, is acrid and extremely copious. This leucorrhœa may continue long after the menstrual discharge has entirely ceased to appear. At this period, we not unfrequently meet with colic, uterine cramps, pains in the sides, weight in the loins, or distressing itching in the parts.

The most distressing diseases with which the change of life is attended, and often terminate fatally, are ulcers and polypi of the uterus, and cancers of this organ and of the breast, also ; pulmonary phthisis (or consumption), likewise, takes a fresh development and frequently terminates fatally.

In this place, it will be sufficient to refer to the different disorders described in this chapter, such as hemorrhage, flooding, diarrhœa, etc., and to their corresponding medicines, for the treatment of the various forms of disease that arise at the change of life. The remedies most frequently useful in disorders of the critical age will be found, and other affections which may be the most prominent of those which attend the change of life. By all means, the simple treatment for promoting and maintaining the general health and strengthening the constitution should be adopted and wisely pursued.

INFLAMMATION OF THE BREASTS.

The mammæ constituting exclusively a part of the female organism, we prefer treating of inflammation of the mammæ in this place, instead of ranging this disease among the diseases of the thoracic organs.

Mastitis, or inflammation proper, only occurs during or immediately after nursing. The painful, sometimes rather extensive, hardened swellings of single portions of the breasts, which sometimes occur among unmarried females or married women who are not nursing, especially about the time of the menses, are evidently transitory states of congestion which never terminate in suppuration.

The cause of mastitis is always traceable to the impeded discharge of milk. By some cause or other, soreness, or a bad shape of the nipples, or too feeble drawing of the child, one or more milk-ducts become closed.

The doctrine that mastitis can originate in dietetic transgressions or cold, is a convenient supposition rather than a scientific fact. What happens with other abscesses, is, likewise, true in regard to abscesses of the mammæ; in some cases they heal rapidly, in other cases they cause vast destructions of tissue. Mastitis is most apt to occur soon after confinement, or shortly after weaning the child; mastitis occurring at the latter period, is less apt to lead to the formation of abscesses.

Sure Signs of the Ailment.

The disease never breaks out all at once. Generally, women experience, some time previous, a gradually increasing pain, both spontaneously or while the child is nursing and a swelling develops itself soon after. As a rule, the lower or lateral lobes are inflamed, very seldom the upper ones, and still less frequently both breasts. Sooner or later, sometimes in a few days, and at other times in some weeks, the painful spot becomes red and more sensitive, and the inflammation is intense, the whole organism feels the effect of the inflammatory process, and shows its sympathy by febrile phenomena. Soon the infiltrated tissue shows the signs of suppuration, the pus

being discharged through a small opening. As soon as the discharge commences, the pain ceases and the febrile symptoms abate.

The course of the inflammation depends upon a variety of circumstances. If the inflammation is confined to one lobe, the abscess most commonly discharges close to the nipple, empties itself very rapidly, and heals. If several lobes are inflamed, or the inflamed lobe is situated near the base, the suppuration, swelling, and pain continue for a long time; months and even years may elapse before the abscess heals, which discharges through several openings near the nipple. This disorder never lasts less than two weeks, and, under corresponding circumstances may continue for months even in its acute form.

General Treatment.

The treatment of mastitis includes, above everything else, a prophylactic treatment which has to be commenced long before confinement, especially in the case of primiparæ (a woman with her first child). The preservation and proper management of the nipples, and of the mammæ generally, should be a constant subject of our attention. After confinement, if women do not intend to nurse their children, they will have to dispense with liquids as much as possible.

Nursing women have to keep the following points constantly in view: the breasts must not be kept too warm, must not be enclosed in tight clothing, and must, by some suitable support, be prevented from dragging down; every time after the baby has nursed, the nipple must be washed, but not be kept moist between the acts of nursing; the excessive use of liquids which women fancy favor the secretion of milk, must be avoided; the child should be put to the breast as seldom as possible; for the more hungry it is the more vigorously it will draw and the more completely the breast will be emptied.

At the same time the nipples will not be held so long in the child's mouth, and they will not be exposed so much to the risk of being made sore by the constant nursing. By following these instructions, and more particularly, by putting the child to the breast every two hours, mastitis will generally be prevented. You must do it.

If the breasts have become hard and painful, the best remedy in the case of lying-in women is Bryonia, less frequently Belladonna; whereas, the latter medicine is better adapted to women who are weaning their infants. We sometimes succeed in dispersing the stagnation of the milk by gently rubbing the indurated portion while the child is nursing. The same good effect is sometimes obtained by causing the milk to be drawn by an older, more vigorous child.

In no event should the infant be all at once kept from the breast, even if nursing causes pain. It is only if the pain is very acute, and the hardness considerable, that the infant should no longer be put to the diseased breast. Belladonna will now have to be administered. As soon as redness has set in, the chances of scattering the inflammation are very slim; in some exceptional cases we may sometimes succeed in effecting this result by a few doses of Mercurius. Warm poultices should never be omitted; they sometimes favor the dispersion of the abscess as much as in other cases they hasten the process of suppuration. Hepar sulphuris will promote the discharge of the pus.

A great many authorities teach to open the abscess at an early period, in order to prevent the further spread of the inflammation. We doubt whether such a proceeding is justified by corresponding results; after opening the abscess, we have often seen the inflammation spread much more rapidly; in the most tedious cases of mastitis, the abscess had been opened in accordance with this suggestion. In a fortnight, at least, the discharge of pus ceases under the use of a few doses of Mercurius, and the sore heals.

Treatment for Inflamed Breasts.

Bryonia is the principal remedy in this affection, before the inflammation becomes fully developed, especially when the breasts are hard, red, tense, and tumefied, and feel heavy, and when there is some degree of fever. *Dose*: Of a solution of six globules to four teaspoonfuls of water, give a teaspoonful every four hours.

Belladonna is, however, required when the inflammation is more intense, and the erysipelatous appearance of the skin is clearly defined,

usually running in radii ; and is, in such instances, usually sufficient to subdue all such inflammatory symptoms. *Dose* : As directed for *Bryonia*.

Sulphur may be required, more especially for the treatment of scrofulous subjects, and when the previous administration of Belladonna has been productive of partial or limited improvement, and evident susceptibility remaining, even if the active inflammatory symptoms have been allayed. It is also useful when, after the bursting of an abscess in the breast, the cavity is slow in healing up, and the discharge excessive. *Dose* : As for *Bryonia*.

Graphites should be employed, particularly in scrofulous subjects where the breasts are in such bad condition from previous inflammations and abscesses that the milk cannot flow, and its retention threatens inflammation and abscess. Graphites will, in most cases, ward off this difficulty. Should Graphites fail, *Phytolacca* should be tried, no other remedy being more prominently indicated. *Dose* : As directed for *Sulphur*.

Phytolacca-decandria will be found to be a most valuable remedy in many cases ; more particularly where the breasts are hard from the commencement of the disorder, sensitive to touch, and more or less painful. It will also prove useful for "lumps" in the breasts. *Dose* : As directed for *Bryonia* ; use, also, as an external application.

Mercurius may be required after any of the foregoing medicines, when, notwithstanding the previous treatment, and the reduction of the inflammatory symptoms, a degree of induration still remains. *Dose* : As directed for *Sulphur*.

Phosphorus is indicated when symptoms of threatening formation of matter (abscess), such as increase in pain, with transitory chills, and throbbing in the breast ensue. Its immediate employment, under such circumstances, will often succeed in speedily relieving pain, and preventing the ripening and bursting of the abscess. It is also indicated in severe cases where there are already fistulous ulcers formed, of blue appearance, and having callous edges ; and the patient has hectic fever and night sweats. *Dose* : Three globules, every six hours, until relief is obtained.

HEARTBURN—ACIDITY—WATERBRASH.

These distressing forms of gastric disturbance sometimes make their appearance soon after conception, while in other cases they may not make their appearance until after the fourth month. Some women are remarkably subject to these symptoms when pregnant; in others they are manifested with less violence; in others not at all. There may be merely a burning sensation—heartburn in the throat—which indicates sympathetic irritation; or the severe forms of waterbrash with acidity which arise from more fully developed irritation.

As in the nausea and vomiting of pregnancy, so in waterbrash, acidity, and heartburn, every degree of intensity and variety of manifestation and complication may be seen in different individual cases. Sometimes these disturbances are found accompanied with, and greatly aggravating the nausea and vomiting, while at other times they seem to appear instead of the vomiting.

As in cases of ordinary dyspepsia, these sufferings are worse after certain articles of food or drink, such as meats, fat meats or gravies, milk or fruit. In the more severe cases, nearly everything that is eaten becomes but an added fuel to the burning fire. Still, a careful avoidance of all those articles which, whether solid or liquid, are found to disagree most, and a careful selection from the remedies given, will, as in cases of nausea and vomiting, go very far to remove the most distressing symptoms, and eventually to secure a great improvement in the general health.

Treatment.

Antimonium Crudum. Nausea alone or nausea and frightful vomiting with convulsion. Belching, with a taste of what has been eaten. Thirst at night. Painful sense of fulness of the stomach, which is sore on pressure. *Dose:* Eight pills every four hours.

Arsenicum is very useful when there is a very great debility and exhaustion. Very pale, white look. Sensation as of a stone in the stomach. Vomiting of fluids as soon as she takes them. Exhausting

diarrhoea. Feels cold and wants to be in a warm room. Very uneasy and restless. *Dose*: As for *Antimonium Crudum*.

Conium. Vertigo on turning in bed. Eructations with heartburn. Terrible nausea and vomiting. Where the history of the case reveals the fact of swelling and soreness of the breasts with each menstrual period, and the patient always feels worse after going to bed, and has to walk about to get relief. *Dose*: Six pills every three hours.

Sepia. The thought of food sickens her. Eructations tasting like bad eggs. Want of appetite. Taste bitter or saltish. Disgust for all kinds of food. Vomiting of food and bile. Constipation. *Dose*: Six pills every night and morning.

CONSTIPATION OF PREGNANCY.

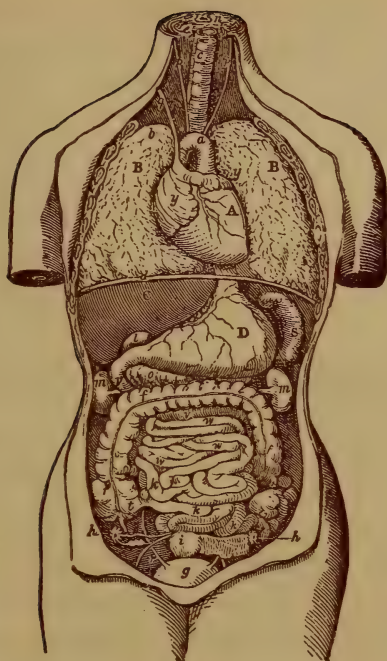
Constipation is a very common attendant upon pregnancy, so frequent that by some it is deemed almost a natural consequence. But it is much more apt to occur, and at the same time to be more troublesome and obstinate, in pregnant women, whose habits of life are confining, and those who are naturally of a more costive habit. When it does not arise from mechanical pressure exerted by the uterus upon the rectum, by which its dimension is lessened and its action paralyzed, active exercise in the open air (avoiding indigestible food, strong coffee, and other stimulating liquids) is sufficient to remove the complaint, or, at all events, render it less troublesome.

When nature requires further assistance, the following remedies have given the best satisfaction in the numerous cases which we have treated.

Treatment.

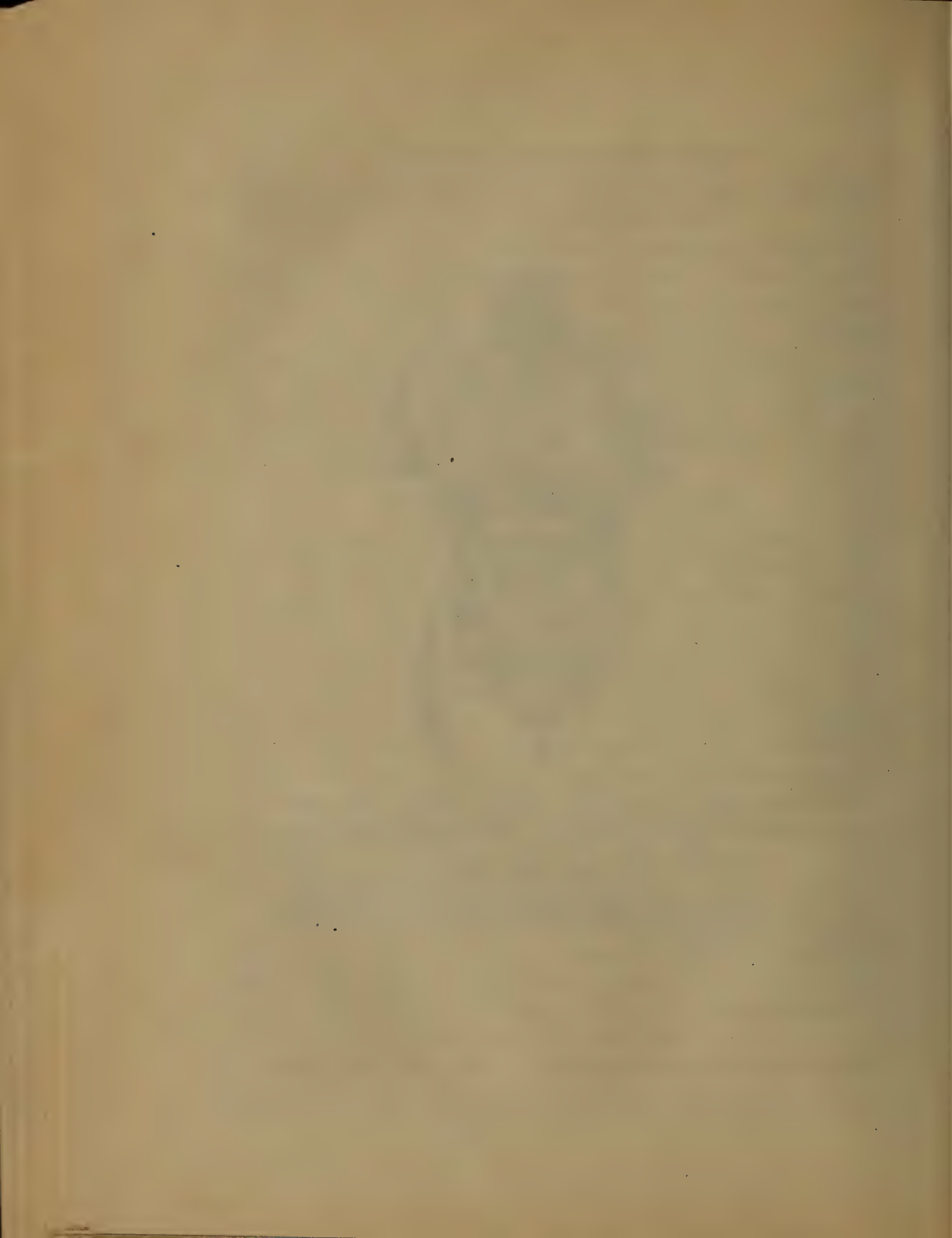
Nux Vomica. In women of sedentary habits, accustomed to the use of much coffee, wine, and rich and highly-seasoned food, generally. Stools large and difficult; colicky pains, or loud rumbling or rolling in the bowels. Constipation in persons who have been in the habit of using purgatives. Rush of blood to the head during stool. *Dose*: Four pills every evening, dry on the tongue.

Ignatia can be made use of when the same symptoms as given after



THE VITAL SYSTEM.

A. Heart. **B, B.** Lungs. **C.** Liver. **D.** Stomach. **S.** Spleen.
m, m. Kidneys. **g.** Bladder. **d** is the diaphragm which forms
the partition between the thorax and abdomen. Under the
latter is the cardiac orifice of the stomach, and at the right
extremity, or pit of the stomach, is the pyloric orifice; below
are the large and small intestines. **i.** Womb. **h, h.** Ovaries.
g. Bladder.



Nux., with the addition of an empty feeling at the pit of the stomach ; sighing and full of grief. *Dose* : Four pills every morning, dry on the tongue.

Bryonia. The stool is mostly dark, dry and hard, as if burnt, and is evacuated with much difficulty. The lips are parched and cracked. Much thirst. Stinking flatulency. Obstruction of the bowels from hardened stool. Stool too large to be evacuated without pain. *Dose* : The same as directed for *Nux*.

Sepia. Sensation of weight or heavy lump in the anus ; this is a very characteristic indication. The stool is very difficult to pass, even with the most terrible and involuntary strainings. Knotty and insufficient stool. *Sepia* has given very marked benefits. *Dose* : A powder each second night.

TOOTHACHE DURING PREGNANCY.

Toothache is a common and very distressing accompaniment of pregnancy, being, in fact, only a particular form of neuralgia.

If toothache occurs in sound teeth, as is quite frequent, they should never be extracted, and only the greatest care should be used in extracting decayed ones, especially if the patient be of a very nervous temperament. The female should, as soon as she is in proper state, put herself under proper treatment, for this is a valuable indication of some constitutional taint lurking in the system, and no remedies can be otherwise than palliative, until this tendency is eradicated.

Treatment.

Alumina (Alum). When the pains are excited by mastication (chewing of the food), and when they are of a tearing nature, extending to the cheek bone, temple and forehead.

Calcarea. When the toothache is excited or aggravated by cold air, or anything hot or cold, and attended with painful sensation of the gums, and pulsative, gnawing, or throbbing pains which are aggravated by noise.

Sepia is particularly indicated when there is pulsative, shooting,

drawing toothache, with pain extending to the ears, or to the arms and fingers, excited by compressing the teeth or by cold air, and attended with swelling of the cheek, and enlargement of the glands under the lower jaw.

Magnesia Carbonica. Nocturnal pains in the teeth, insupportable when lying down, and compelling the patient to get up and walk; pains generally boring, burning, drawing, tearing, and resembling those of ulceration, attended with swelling of the cheek on the affected side. *Dose:* These remedies may be given every three hours, six pills at a dose, until relief, and then the time may be lengthened.

SWELLING OF LOWER LIMBS—VARICOSE VEINS.

This a very common attendant of pregnancy; it often occasions no little inconvenience, and is usually confined to the seventh, eighth and ninth months. It is supposed to arise, in most instances, from mechanical pressure alone, and to be free from constitutional disease. This is true in those cases where it is not accompanied by dropsical affections. Standing and walking serve to aggravate this condition; it becomes worse toward evening, gradually increases as pregnancy advances, and is often combined with a varicose state of veins.

Many females suffer much during pregnancy from distention of veins in the thigh and other parts, which, becoming violent, eventually cause great pain and inconvenience. These varicose veins generally arise from obstructed circulation, caused by the pressure of the uterus upon the blood-vessels. Considerable alleviation is experienced by constant bathing with water or with diluted alcohol or brandy. Also, by bandaging from the foot upwards with a gentle and equal pressure, and by preserving a recumbent posture, which is required in severe forms of the complaint, accompanied with considerable swelling of the feet, ankles, etc.

Treatment.

Pulsatilla may be given, particularly when there is excessive pain and swelling, with a good deal of inflammation, or when the veins are of a livid color which is imparted to the whole limb.

Arnica is of great service when the occupations of the patient render it impossible for her to lay herself up, and avoid much standing and moving about in discharge of her domestic duties.

Pulsatilla and **Arnica** given in alternation, a dose every day, will prove very beneficial in such cases.

Nux Vomica when the affection is attended with constipation and piles, and irritability of temper. *Dose* : Six pills every evening.

Arsenicum when the veins are attended with severe burning pain, with a sensation as if scalding water was running over them. *Dose* : Eight pills every second evening.

URINARY DIFFICULTIES DURING PREGNANCY.

As gestation advances, the increasing size of the uterus causes it to press more and more against the bladder. Thus the capacity of that organ is diminished by the pressure which necessitates a much more frequent discharge of urine. The same frequent micturation results, too, from direct irritation of the neck of the bladder, causing hourly calls to pass water, which are sometimes but partially relieved by the flow of a few drops, only, at a time, or the irritation may amount to dysury (painful urination), or even to a complete retention of urine.

Where some displacement seems to be the cause, which may sometimes be known by the suddenness of the onset of the difficulty, especially if it follows some accident or over-exertion, the case should receive treatment for the difficulty, different than that which arises from other causes.

Sometimes Caused by Pressure of the Womb.

Incontinence of urine sometimes appears, especially in the latter stages of pregnancy. When it appears in the early months, it may result from the pressure of the womb upon the neck of the bladder before it rises out of the pelvic cavity, causing the loss of tone of the part. This difficulty will often yield to the proper remedy; but if not, when it comes on in the early stage of pregnancy, it may be expected to disappear when quickening takes place.

For the medical treatment of these difficulties, the following remedies should be studied. It is to be noted, likewise, that these remedies should be consulted and may be required for urinary difficulties occurring, not only during pregnancy, but before, during and after parturition as well.

Treatment.

Aconite. Retention of urine, with stitches in the region of the kidneys. Difficult and scanty emission, with pinching around the umbilicus (navel). Bright-red, hot urine. Desire to urinate, accompanied with great distress, fear and anxiety. Worse from exposure to dry, cold air. *Dose:* Six pills every half hour or hour, owing to the severity of the case.

Arnica. After passing a little urine she wishes to pass more, but is unable to do so at that time. Brown urine with brick-red sediment. A bruised and sore feeling exists across the lower part of the abdomen. *Dose:* Four or six pills every two or three hours.

Cantharis. Very frequent urination, even sixty times an hour, with violent cutting pain, causing her to scream. The urine is often bloody. The urine does not flow in a stream, but dribbles away, or passes drop by drop, with cutting and burning pains, and tenesmus of the bladder, which is agonizing in severity. *Dose:* Same as for *Aconite*.

SECRETION OF MILK.

This is one of the most interesting and remarkable changes occurring during the lying-in period. While the child is still in the uterus, all that pertains to the mother unites to effect its nourishment, growth, and development there. Suddenly all this is interrupted, the child is expelled from the little world within, and has to find nourishment elsewhere. Nature intends it to be supplied, as before, from the maternal blood, though through the medium of mammary glands. The reaction upon the organism, from this change from the uterus to the breast, causes what is called milk fever, in consequence of which there results a disturbance in the system, more or less well marked, according to the obstacles to be overcome.

In some cases appear chills, fevers, headaches, and a great variety of pains and suffering; while in others this period is passed without any of the above-mentioned disturbances. As a general thing, all the disturbances incident to the coming of the milk are less when the child is applied to the breast as soon after delivery as is practicable. Much advantage is gained both to the mother and child by this method, since it serves to lessen the suffering of one from hunger, and the danger of the other from fever.

It is of vast importance that the natural operations of the organism peculiar to this condition proceed with regularity. Among these, the secretion of milk takes a prominent position, and its sudden suppression is apt to be followed by internal and local inflammation, flow of blood to the head, hot and cold flashes, etc. The use of the following remedies should be employed according to their indications.

Treatment.

Pulsatilla should be promptly applied in cases of sudden suppression of the secretion of the milk, whatever cause has occasioned it; and this medicine will frequently be found sufficient to restore the natural flow of milk. *Dose*: Four pills, repeated every four hours (or every eight, in very mild cases) until change.

Bryonia is to be preferred when there is oppression at the chest or stitching pains in the chest or side, or more particularly if the suppression can be traced to some sudden mental emotion, or to catching cold. *Dose*: As for *Pulsatilla*.

Chamomilla should be selected if the patient be particularly irritable and excitable, and the suppression be followed by intense flushing of heat or burning heat of the hands and face, either with crimson flush or alternate flushing and paleness, or one cheek red and the other pale. *Dose*: As for *Pulsatilla*.

EXCESSIVE SECRETION OF THE MILK.

Occasionally, on the other hand, it happens that too abundant a secretion takes place, causing distention of the breasts with spontane-

ous flow of milk, keeping the breasts constantly wet. Relief from such an uncomfortable state may be obtained by the appropriate remedy according to the indications below. The function of lactation being one purely physiological, and provided for in the economy of suitable forces. Under the stimulus of maternal instinct and affection most women enjoy perfect health during its continuance. Many, indeed, are never so well as when giving suck to their children.

Gradual Exhaustion of the System.

Under the influence of this process, there arises a greater activity of all the functions at the same time, and, also, a greater strength of appetite, and corresponding energy of the digestive powers. The process of conversion of food is unusually rapid, the excess going to form milk. Where a greater amount is thus formed than is required, the system becomes gradually exhausted, even in health. This over-production may be due simply to excess of vitality, while it may result from the efforts of nature to supply the required material support, even under difficulties. The following remedies will be found beneficial, as the indications appear :

Treatment.

Aconite may be taken as a precautionary measure when there is high febrile action of the whole system, and we are ignorant of the exciting cause. *Dose* : Take four globules, repeated at intervals of four hours, until the frequency of the pulse is diminished and the skin becomes moist.

Rhus-tox. frequently proves of much service where febrile symptoms arise from distention of the breasts, induced by an excessive secretion, and indications of what is generally termed milk fever (which, however, frequently arises from other causes). *Dose* : Three globules every six hours until amelioration or change.

Calcarea Carb. should be employed in cases in which excessive distention of the breasts, spontaneous emission of milk and loss of flesh occur without any marked and active fever symptoms—or after the

previous employment of Aconite or Rhus. when the fever symptoms have been allayed. *Dose*: Six pills as directed for *Rhus*.

Phosphorus is of especial value in cases of this kind, when there are marked signs of a tendency to consumption, and emaciation takes place rapidly. Phosphorous is yet further indicated when there are sensations as of a rush of blood, with oppression at the chest, and sometimes even short, dry, hacking cough. *Dose*: Three pills as directed for *Rhus*.

MILK FEVER.

The secretion of milk is considered an operation of nature, and not one that requires medical aid for its regulation, but occasionally suffer some slight uneasiness for a few days following confinement, and when any of the below-mentioned group of symptoms present themselves, the affection is known by the name of Milk Fever.

Shiverings and heat terminating in perspiration; the pulse is at first weak, changing to various phases (sometimes quick and frequent), at others soft and regular; and, in some instances, the symptoms are attended with a drawing pain in the back, extending to the breast, a disagreeable taste in the mouth, thirst, oppressive breathing, anxiety, headache, etc.

The exciting causes are neglecting to put the infant to the breast sufficiently early, which allows the absorption of the milk into the circulation, causing mental emotions, fright, or excessive talking.

Treatment.

Nature herself, if not disturbed by improper treatment, will, in most cases, suffice to restore the equilibrium of the system; should the affection become aggravated, we may dread the setting in of puerperal fever.

Aconite must be employed in all instances where considerable fever is present, and will usually remove all the symptoms. *Dose*: Give four globules, repeated after the lapse of three hours, if necessary.

Belladonna is very useful in particular cases in which complications with very severe disturbance of the brain, or when inflammatory

action in the breast may supervene. *Dose* : Three globules, repeated at intervals of four hours, until a degree of improvement sets in, and then at intervals of six hours.

Rhus. is also of considerable service when extreme fullness, tension and painfulness of the breasts, with excessive secretion of milk, attend the case. *Dose* : As directed for *Belladonna*.

CHILD-BED FEVER—PUERPERAL FEVER.

The trouble is of so grave a nature that it is with reluctance that we approach the subject. Where it is at all possible, we would advise a skilled physician to be employed. As this work, however, will enter some home where no physician can be procured, it has been thought judicious to treat the disease at sufficient length to be available in cases of emergency.

This disease assumes various types and degrees, and has received various names. Usually the disease begins on the second, third or fourth day, although, in some cases, it even appears later, as late even as the eighth or ninth. It sometimes begins with a distinct chill, and, again, there may be only slight chilliness, imperfect and merely noticed. The pulse is very rapid, full and soft. In some cases, there is neither pain, distention nor tenderness of the abdomen; while in others, the pain is very acute, the distention enormous, and the tenderness exquisite.

Perspiration and Thirst.

Profuse sweating is a very common and distressing accompaniment of this disorder; the sweating of puerperal fever does not diminish the amount of urine, nor abate the quickness of the pulse. An intolerable thirst prevails, and the patient drinks immense quantities of whatever fluid she may be allowed. Dark spots appear on the wrists or other parts of the body.

At first, the lochia may be unaffected; they may be even increased in quantity, but more commonly they are entirely suppressed. As the disease advances, usually about the third day, diarrhœa and vomiting may supervene. The patient becomes listless and languid



THE UTERUS (WOMB) AND ARTERIES.

a, a. The kidneys. *b, b.* The ureters. *c.* The uterus. *d, d.* The broad ligaments. *e, e.* The ovaries. *f, f.* The Fallopian tubes. *g.* The rectum cut. *h.* The aorta. *i.* The superior mesenteric artery divided. *k.* The inferior mesenteric artery divided. *l, l.* The renal. *m, m.* The common iliacs. *n, n.* The external iliacs. *o, o.* The internal iliacs.

osing all interest in surrounding circumstances, and even in her child, and the expression of her face indicates anxiety and great prostration; or, on the other hand, she may be unduly excited, nervous and tremulous. If the disease progresses in spite of treatment, delirium commonly supervenes. Rattling of the breathing, with enormous distention of the abdomen, are usually regarded as fatal symptoms.

Symptoms and Causes.

As the disease advances, the womb, the peritoneum and other organs, and tissues of the abdomen become involved in the prevailing inflammation. The first symptoms of this disease are similar to those of "milk fever," but the distinction is to be made by the fact of absence of pain, and more particularly by absence of tenderness in the abdomen.

This disease may result in consequence of a chill occasioned by a draught of air, or other cause, or from the use of damp or wet linens, or it may be occasioned by violence; or, again, it may be impossible to assign any reason for its occurrence; in which case we are led to believe that it is due to infection, or arises in consequence of some lurking taint or predisposition of the system.

Aconite should be employed, at first being indicated by the feeble condition, and by other circumstances; and will in very many instances, when promptly administered, particularly in those cases of a more simple form, serve to dissipate the entire disordered condition, and restore harmony to the system in an almost magical manner. *Dose:* Give four globules every hour, or half hour, according to the severity of the symptoms. If, at the end of twelve hours, the symptoms have abated, the intervals may be extended two or three hours.

Belladonna should be administered when the pain is violent and cramp-like, coming on suddenly and ceasing as suddenly, with swelling of the abdomen; or the pains are forcing, as if the contents of the abdomen would be forced out; sensitiveness of the belly to the touch—she cannot even bear the jar of the bed; redness of the face and eyes; headache; dry mouth with red tongue; sleeplessness and restiveness; delirious; suppression of the lochia or escape of red and fœtid blood;

the breasts are red and inflamed, or swollen and empty. *Dose:* As directed for *Aconitum*.

Hyoscyamus may be used in some cases of a similar nature to that indicative of *Belladonna*, but where the disease has been developed by mental emotions, and is characterized by spasmodic symptoms, jerks and twitches, delirium, throwing off of the bed-clothes, it is more particularly indicated. *Dose:* As for *Aconite*.

Rus-tox. is suitable when the fever is of a low typhus grade; the patient is very restless, constantly tossing about. The lochia is again tinged with blood, or clots of blood are discharged; aching soreness and stiffness of the limbs; the tongue is red. *Dose:* As for *Aconite*.

Colocynth will be found valuable when the abdomen is greatly distended, and the pains are unbearable, being of a sharp, cutting or lancinating character, which cause the patient to draw the thighs up as close to the belly as possible; diarrhoea with colicky pains, aggravated or excited by eating or drinking. *Dose:* As for *Aconite*.

Chamomilla is useful for cases in which the breasts are flaccid and without milk; diarrhoea; pains in the abdomen like pains of labor; general heat with redness of the face, or one cheek is red, and the other is not; great agitation, impatience and nervous irritability. *Dose:* As for *Mercurius*.

Diet and Regimen.

The most absolute repose of mind and body should be secured; all noise should be shut out, the room darkened and a moderate temperature maintained; the room should be well ventilated, so as to have the air changed without admitting a cold draught. Purification of all aliment must be enforced, and the thirst allayed by small quantities of cold water, which should be iced in summer, or when vomiting is present. If the lochia is suppressed, flannels wrung out of warm water may be applied to the external genitals, or a tepid injection may be thrown into the rectum, if there be great constipation; but it must be a small quantity, that the bowels may not be much disturbed. The infant should be removed and fed on cow's milk and water until the patient is out of danger.

CHAPTER XIX.

PREGNANCY EXTERNAL TO THE WOMB.

ARE Occurrence—How the Ovum is Nourished—Causes of Such Conception—
Peculiarities of the Cases—Obscure Symptoms—General Treatment—Appear-
ance of Inflammation—Bursting of the Cyst—Relief for Pain—Opiates and
Cordials—Operation for Removal of Fœtus—Successful Treatment of this
Peculiar Form of Pregnancy.

OCASIONALLY, though fortunately very rarely, after impreg-
nation has occurred, the ovum does not reach the womb, but
remains either embedded in the ovary, or the Fallopian tube, or
falls into the general cavity of the abdomen. Being endowed with
life, it attaches itself to that portion of the mother's body wherever it
may happen to have lodged, and a communication by vessels is recip-
rocally effected between the mother's structures and itself.

By means of these vessels it is nourished, an imperfect placenta
(afterbirth) is formed, and its increase progresses in as regular, and
almost as rapid a manner, as though it had been received into the
cavity of the womb itself. It has been stated by Coste that of all
animals woman is alone subject to this irregularity; but this is cer-
tainly erroneous, for it has been known to occur frequently in the
brute creation. Instances of it have been observed in the cow, sheep,
bitch, and hare, besides others.

The Causes.

It would be idle and unprofitable to speculate deeply on the causes
that may produce this deviation from nature's established institutions.
Explanations have been offered, founded on original conformation,
pathological changes, and accidental occurrences. It has been noticed
by Breschet and Campbell that the womb of the infant frequently
possesses somewhat of a bifurcated or forked formation, such as is
natural to the monkey, and in a more striking degree to the female
quadruped; and others have observed it in the adult subject

This anatomical formation has been supposed to favor the production of tubal or parietal extra-womb impregnation. But almost all the cases on record have occurred to women who had previously borne a family; and we should presume, if such a shape of the womb disposed to it, that it would be more frequently met with in first pregnancies.

Again, a morbid condition of that Fallopian tube through which the ovum is passing, has been supposed to explain it; such as an imperious state taking place after conception; a contraction of its calibre, owing to engorgement of its lining membrane, or spasm of its fibres, or paralysis affecting its structure; and it has been attributed to disease existing in the coats of the ovum itself.

Peculiarities of the Cases.

Among the accidental occurrences much importance has been attached to mental agitation on the part of the woman, while in the enjoyment of the conjugal embrace; and some cases are recorded, in which this irregularity has followed a shock or surprise received in coition. Thus a case by the late Baudelocque was supposed to have depended on the woman's hearing somebody trying to enter the apartment.

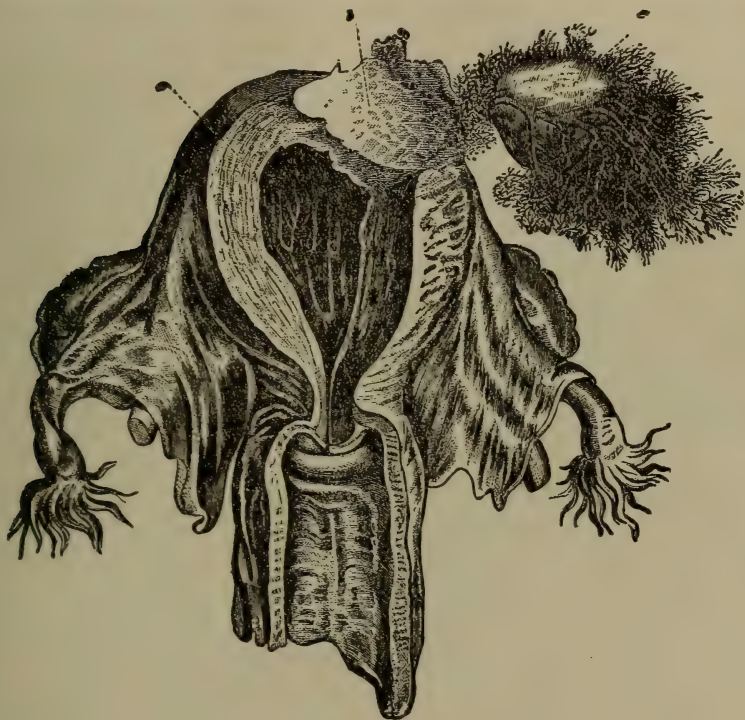
Another very similar is also reported; and a third where the woman experienced much alarm by a stone being thrown through the window of her chamber during the time of connection; but it is very doubtful whether such a cause could produce the effect now under consideration. The fact, however, of a large relative proportion of unmarried females having become the subjects of the complaint, would afford some foundation for the idea that such persons are more liable to be afflicted with extra uterine gestations than women of regular habits and steady character.

The Symptoms.

The symptoms are at first very indefinite and obscure; they are generally those of incipient pregnancy; the menses become suppressed; the breasts enlarge; and the areolæ are more evident; there is morn-

ing sickness ; but more local pain is felt ; and this pain is referred to one point of the side, mostly low down, within one or other ilium. It may depend on inflammation, or perhaps, which is more probable, on the cyst not yielding kindly to the growing ovum.

In some instances, indeed, the patients have enjoyed uninterrupted



EXTRA-UTERINE PREGNANCY.

a. The thickened wall of the womb. *b.* Original position of the *fœtus*. *c.* Sac containing *fœtus*.

good health, until a period nearly approaching the full term of healthy gestation, but this is not common. If the child continues to live it quickens ; but the motion is also felt more on one side than the other, and is usually attended with much suffering ; the patient increases in size, and is satisfied she is pregnant. Sometimes the child's limbs can

be traced through the walls of the abdomen, especially in conception of the belly.

The monthly periods have been known to continue with regularity for the first five or six months; but more usually, when there has been any colored discharge from the vagina, it has appeared at uncertain intervals, has consisted of blood, has been profuse in quantity, and attended with the expulsion of clots; sometimes, indeed, with masses of fleshy substances that have been mistaken for moles, or with portions of what has been considered the afterbirth. These phenomena have given rise to the belief that the patients had miscarried. The bowels are usually constipated after four or five months, and the urine is passed frequently and with pain.

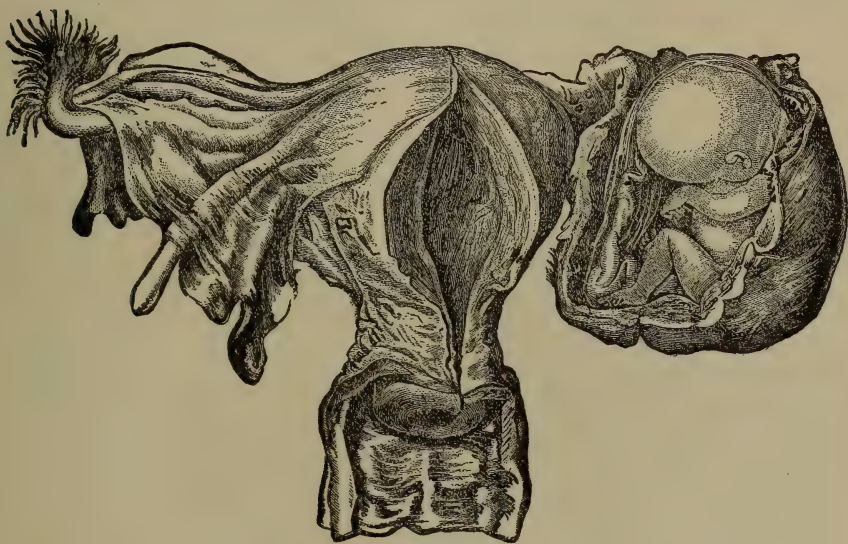
When Inflammation Sets In.

On making an examination through the vagina, the mouth of the womb may be raised so high by a portion of the child's body occupying the pelvis, as to be beyond the reach of the finger; and if it can be touched, the womb will be found unimpregnated, though rather larger and heavier than in its virgin state; with the cervix not at all, or but slightly, developed. A foot or hand, or the head of the child, or some other portion of its body may occasionally be felt through the coats of the vagina. After the child's death, and when the efforts made by the uterus to expel it have ceased, which are evidenced by spasmodic pains, accompanied by some sanguineous discharge, milk is generally secreted in the breasts; the abdomen after a time diminishes somewhat in size; and the tumor may remain without any alteration in its volume, producing little or no distress.

If putrefaction, however, takes place, symptoms of general abdominal inflammation supervene; and when the ulcerative process is established, it is attended with extreme depression, small quick pulse, hurried and painful respiration, entire loss of appetite, great emaciation, hectic fever, absence of sleep, vomiting and purging. Together with the ~~feces~~, pus and large quantities of the most offensive putrid matter, are ~~from time to time~~ evacuated.

This may, perhaps, give the first indication of the true nature of the case ; and the patient's size diminishes in proportion as the evacuations are copious. Should she bear up against the weakening effects of such destructive actions, the whole contents of the sac will be expelled, the time occupied varying exceedingly ; and when they have entirely passed the healing process is set up, and the patient may be restored to comparative health.

Sometimes there is but one communication established with the ali-



POSITION OF FŒTUS OUTSIDE THE WOMB.

mentary canal, at others there are two or three ; sometimes, also, ulceration takes place between the sac and the uterus or vagina ; at others, again, the adhesion is formed between the sac and the abdominal parietes, the contents point as an abscess, and are evacuated externally. We are pretty well persuaded that those cases on record, in which it is supposed that a fœtus lay for an indefinite period in the womb without being expelled, or that it had died in the womb, and had made its way in time outwardly by ulceration, were, indeed, instances of different varieties of extra-uterine gestation.

Should the cyst burst, a very different train of symptoms from those above mentioned show themselves. It is probable that the patient may have considered she was advancing in healthy pregnancy, and no indication may have appeared to lead to the knowledge that this serious irregularity existed, beyond some occasional pains that could not easily be accounted for; when she is suddenly seized with the most violent cramp in the side of the abdomen, bearing more the character of colic than any other kind of pain.

The symptoms, indeed, of hemorrhage, one after the other, appear (in addition to the excruciating abdominal suffering), until she sinks, within a few hours of the rupture taking place; for very rarely, indeed, has recovery happened under such circumstances. We cannot be surprised at the violence of the symptoms, when we reflect that they are occasioned by the combined influence of internal hemorrhage, laceration, and the effusion of a large quantity of blood into the delicate and highly-sensitive peritoneal cavity.

Directions for Treatment.

Our treatment must depend entirely on the symptoms, and must be directed towards the relief of pain, and assisting nature in her efforts to get rid of the offending mass. The bladder must be particularly attended to. The pain may be relieved by opiates, and nature may be assisted in keeping up the strength by tonic medicines, good diet and cordials, during the process of putrefaction and ulceration. Should any of the bones, in their passage through the rectum, become fixed in that bowel, which is very likely to happen with the broad bones of the skull, the femur and some others, they may be carefully removed, either by the fingers or a pair of forceps.

It has been recommended—the child being still alive—that an incision should be made, either through the vagina upon the head, breech or foot (provided either of these parts could be felt low down in the pelvis, and the nature of the case admitted of no doubt), or through the abdominal muscles; and that the child should be extracted by the forceps or hand, for the sake of its preservation.

PART III.

CARE AND MANAGEMENT OF CHILDREN.

CHAPTER XX.

ABLUTION AND CLOTHING.

Every Child Should be Its Mother's Care—The Babe a "Well-spring of Pleasure"
—Directions for Bathing—Prevention of Colds—Skin Eruptions—Free Use of Water—Cleanliness and Health—Treatment for Chafings—Bad Effects of Soda in the Laundry—Proper Time for Bathing the Infant—The Flannel Apron—Clothing—Material for the Belly-band—Light Dressing—Warmth a First Requisite—Danger of Convulsions—How Clothes Should be Fastened—Keeping the Head Cool—Clothing for Winter.

THE care and management, and consequently the health and future well-doing of the child, principally devolve upon the mother; "for it is the mother after all that has most to do with the making or marring of the man." Dr. Guthrie justly remarks that—"Moses might have never been the man he was unless he had been nursed by his own mother. How many celebrated men have owed their greatness and their goodness to a mother's training!"

Napoleon owed much to his mother. "The fate of a child," said Napoleon, "is always the work of his mother;" and this extraordinary man took pleasure in repeating, that to his mother he owed his elevation. All history confirms this opinion. The character of the mother influences the children more than that of the father, because it is more exposed to their daily, hourly observation.

We are not overstating the importance of the subject in hand when we say, that a child is the most valuable treasure in the world, that "he is the precious gift of God," that he is the source of a mother's

greatest and purest enjoyment, that he is the strongest bond of affection between her and her husband, and that

“A babe in a house is a well-spring of pleasure,
A messenger of peace and love.”

We have, in the writing of the following pages, had one object constantly in view—namely, health—

“That salt of life, which does to all a relish give,
Its standing pleasure, and intrinsic wealth,
The body’s virtue, and the soul’s good fortune—health.”

If the following pages insist on the importance of one of a mother’s duties more than another it is this—that the mother herself look well into everything appertaining to the management of her own child.

Blessed is that mother among mothers of whom it can be said that “she hath done what she could” for her child—for his welfare, for his happiness, for his health. For if a mother hath not “done what she could for her child”—mentally, morally and physically—woe betide the unfortunate little creature; better had it been for him had he never been born.

Temperature of the Water.

It is not an uncommon plan to use cold water for the babe from the first, under the impression of its strengthening the child. This appears to be a cruel and barbarous practice, and is likely to have a contrary tendency. Moreover, it frequently produces either inflammation of the eyes, or stuffing of the nose, or inflammation of the lungs, or looseness of the bowels. Although we do not approve of cold water, we ought not to run into an opposite extreme, as hot water would weaken and enervate the babe, and thus would predispose him to disease. Lukewarm rain-water will be the best to wash him with. This, if it be summer, should have its temperature gradually lowered, until it be quite cold; if it be winter, a dash of warm water ought still to be added, to take off the chill. (By thermometer = 90 to 92 degrees.)

It will be necessary to use soap, white Castile soap being the best

for the purpose, it being less irritating to the skin than the ordinary soap. Care should be taken that it does not get into the eyes, as it may produce either inflammation or smarting of those organs. If the skin be delicate, or if there be any excoriation or "breaking-out" on the skin, then glycerine soap instead of the Castile soap ought to be used.

A mother should commence washing her infant either in the tub or in the nursery basin, as soon as the navel-string comes away. Do not be afraid of water—and that in plenty—as it is one of the best strengtheners to a child's constitution. How many infants suffer from excoriation for the want of water!

A piece of flannel is, for the first part of the washing, very useful—that is to say, to use with the soap, and to loosen the dirt and the perspiration; but for the finishing-up process a sponge—a large sponge—is superior to flannel to wash all away and to complete the bathing. A sponge cleanses and gets into all the nooks, corners and crevices of the skin. Besides sponge, to finish up with, is softer and more agreeable to the tender skin of a babe than flannel. Moreover, sponge holds more water than flannel, and thus enables you to stream the water more effectually over him. A large sponge will act like a miniature shower-bath, and will thus brace and strengthen him.

To Prevent Taking Cold.

To prevent a new-born babe from catching cold, it is not necessary to wash the head with brandy. The idea that it will prevent cold is erroneous, as the rapid evaporation of heat which the brandy causes is more likely to give than to prevent cold.

That tenacious paste-like substance, adhering to the skin of a new-born babe, should be washed off at the first dressing, provided it be done with a soft sponge and with care. If there be any difficulty in removing the substance, gently rub it, by means of a flannel, either with a little lard, or fresh butter, or sweet-oil. After the parts have been well smeared and gently rubbed with the lard, or oil, or butter, let all be washed off together, and be thoroughly cleansed away, by

means of a sponge and soap and warm water, and then, to complete the process, gently put him for a minute or two in his tub. If this paste-like substance be allowed to remain on the skin, it might produce either an excoriation, or a "breaking-out." Besides, it is impossible, if that tenacious substance be allowed to remain on it, for the skin to perform its proper functions.

Thorough Washing from Head to Foot.

A babe ought, every morning of his life, to be thoroughly washed from head to foot; and this can only be properly done by putting him bodily either into a tub or into a bath, or into a large nursery-basin, half-filled with water. The head, before placing him in the bath, should be first wetted (but not dried); then immediately put him into the water, and, with a piece of flannel, well soaked, cleanse his whole body, particularly his arm-pits, between his thighs, his groins, and his hams; then take a large sponge in hand, and allow the water from it, well filled, to stream all over the body, particularly over his back and loins.

Let this advice be well observed, and you will find the plan most strengthening to your child. The skin must, after every bath, be thoroughly but quickly dried with warm, dry, soft towels, first enveloping the child in one, and then gently absorbing the moisture with the towel, not roughly scrubbing and rubbing his tender skin as though a horse were being rubbed down.

The ears must, after each ablution, be carefully and well dried with a soft, dry napkin; inattention to this advice has sometimes caused a gathering in the ear—a painful and distressing complaint; and at other times it has produced deafness.

Directly after the infant is dried, all the parts that are at all likely to be chafed ought to be well powdered. After he is well dried and powdered, the chest, the back, the bowels, and the limbs should be gently rubbed, taking care not to expose him unnecessarily during such friction.

He ought to be partially washed every evening; indeed, it may be

necessary to use a sponge and a little warm water frequently during the day, namely, each time after the bowels have been relieved. Cleanliness is one of the grand incentives to health, and therefore cannot be too strongly insisted upon. If more attention were paid to this subject, children would be more exempt from chafings, "breakings-out," and consequent suffering, than they at present are. After the second month, if the babe be delicate, the addition of two handfuls of table-salt to the water he is washed with in the morning will tend to brace and strengthen him.

The Powder to be Used.

With regard to the best powder to dust an infant with, there is nothing better for general use than starch—the old-fashioned starch made of wheaten flour—reduced by means of a pestle and mortar to a fine powder; or Violet Powder, which is nothing more than finely powdered starch scented, and which may be procured of any respectable druggist. Some others are in the habit of using white lead; but as this is a poison, it ought on no account to be resorted to.

If the parts about the groin and fundament be excoriated, what is then the best application? After sponging the parts with tepid rain-water, holding him over his tub, and allowing the water from a well-filled sponge to stream over the parts, and then drying them with a soft napkin (not rubbing, but gently dabbing with the napkin), there is nothing better than dusting the parts frequently with finely powdered Native Carbonate of Zinc-Calamine Powder.

Warding Off Skin Diseases.

Remember excoriations are generally owing to the want of water—to the want of an abundance of water. An infant who is every morning well soused and well swilled with water seldom suffers either from excoriations, or from any other of the numerous skin diseases. Cleanliness, then, is the grand preventative of, and the best remedy for excoriations. Naaman, the Syrian, was ordered "to wash and be clean," and he was healed, "and his flesh came again like unto the

flesh of a little child, and he was clean." This was, of course, a miracle ; but how often does water, without any special intervention, act miraculously both in preventing and in curing skin diseases.

An infant's clothes, napkins especially, ought never to be washed with soda ; the washing of napkins with soda is apt to produce excoriations and breakings-out. As washerwomen often deny that they use soda, it can be easily detected by simply soaking a clean white napkin in fresh water and then tasting the water ; if it be brackish and salt, soda has been employed.

The Mother the Best Nurse.

The proper person to wash and dress the babe is the monthly nurse, as long as she is in attendance ; but afterwards the mother, unless she should happen to have an experienced, sensible, thoughtful nurse, which, unfortunately, is seldom the case.

A good, thick, soft flannel—usually called bath-coating—apron, made long and full, and which, of course, ought to be well dried every time before it is used, is the best for bathing.

Let the infant, by all means, then, as soon as the navel-string has separated from the body, be bathed either in his tub, or in his bath, or in his large nursery-basin ; for if he is to be strong and hearty, in the water every morning he must go. The water ought to be slightly warmer than new milk. It is dangerous for him to remain for a long period in his bath ; this, of course, holds good in a tenfold degree, if the child have either a cold or pain in his bowels. Take care that, immediately after he comes out of his tub, he is well dried with warm towels.

Right Time for Bathing.

It is well to let him have his bath the first thing in the morning, and before he has been put to the breast ; let him be washed before he has his breakfast ; it will refresh him and give him an appetite. Besides, he ought to have his morning ablution on an empty stomach, or it may interfere with digestion, and might produce sickness and pain. In putting him in his tub, let his head be the first part washed. We all

know, that in bathing in the sea, or in fresh water, how much better we can bear the water if we first wet our head ; if we do not do so, we feel shivering and starved and miserable. Let there be no dawdling in the washing ; let it be quickly over. When he is thoroughly dried with warm, dry towels, let him be well rubbed with the warm hand of the mother or of the nurse.

As we previously recommended, while drying him and while rubbing him, let him repose and kick and stretch either on the warm flannel apron, or else on a small blanket placed on the lap. One bathing in the tub, and that in the morning, is sufficient, and better than night and morning. During the day, as we before observed, he may, after the action either of his bowels or of his bladder, require several spongings of lukewarm water, for cleanliness is a grand incentive to health and comeliness.

Remember it is absolutely necessary to every child from his earliest babyhood to have a bath, to be immersed every morning of his life in the water. This advice, unless in cases of severe illness, admits of no exception. Water to the body—to the whole body—is a necessity of life, of health, and of happiness ; it wards off disease, it braces the nerves, it hardens the frame, it is the finest tonic in the world. If every mother would follow to the very letter this counsel, how much misery, how much ill-health might then be averted.

Clothing for the Infant.

Flannel instead of muslin for the belly-band is to be preferred, for two reasons—first, on account of its keeping the child's bowels comfortably warm, and secondly, because of its not chilling him (and thus endangering cold, etc.) when he wets himself. The belly-band ought to be moderately, but not tightly applied, as if tightly applied, it would interfere with the necessary movement of the bowels.

The belly-band should be discontinued when the child is two or three months old. The best way of leaving it off is to tear a strip off daily for a few mornings, and then to leave it off altogether. Nurses who take charge of an infant are frequently in the habit of at once

leaving off the belly-band, which often leads to ruptures when the child cries or strains. It is far wiser to retain it too long than too short a time, and when a child catches whooping-cough, whilst still very young, it is safer to resume the belly-band.

A babe's clothing ought to be light, warm, loose and free from pins. It should be light, without being too airy. Many infant's clothes are both too long and too cumbersome. It is really painful to see how some poor little babies are weighed down with a weight of clothes. They may be said to "bear the burden," and that a heavy one, from the very commencement of their lives. How absurd, too, the practice of making them wear long clothes. Clothes to cover a child's feet, and even a little beyond, may be desirable; but for clothes, when the infant is carried about, to reach to the ground, is foolish and cruel in the extreme.

Warmth a Chief Requisite.

A babe's clothing should be warm, without being too warm. The parts that ought to be kept warm are the chest, the bowels and the feet. If the infant be delicate, especially if he be subject to inflammation of the lungs, he ought to wear a fine flannel, instead of his usual shirts, which should be changed as frequently. The dress should be loose, so as to prevent any pressure upon the blood-vessels, which would otherwise impede the circulation, and thus hinder a proper development of the parts. It ought to be loose about the chest and waist, so that the lungs and the heart may have free play. It should be loose about the stomach, so that digestion may not be impeded; it ought to be loose about the bowels, in order that the spiral motion of the intestines may not be interfered with—hence the importance of putting on a belly-band moderately slack; it should be loose about the sleeves, so that the blood may course, without let or hindrance, through the arteries and veins; it ought to be loose, then, everywhere, for nature delights in freedom from restraint, and will resent, sooner or later, any interference.

As few pins should be used in the dressing of a baby as possible

Inattention to this advice has caused many a little sufferer to be thrown into convulsions.

The generality of mothers use no pins in the dressing of their children; they tack every part that requires fastening with a needle and thread. They do not even use pins to fasten the baby's diapers. They make the diapers with loops and tapes, and thus altogether supersede the use of pins in the dressing of an infant. The plan is a good one, takes very little extra time, and deserves to be universally adopted. If pins be used for the diapers, they ought to be the Patent Safety Pins.

Is there any necessity for a nurse being particular in airing an infant's clothes before they are put on? If she were less particular, would it not make him more hardy?

A nurse cannot be too particular on this head. A babe's clothes ought to be well aired the day before they are put on, as they should not be put on warm from the fire. It is well, where it can be done, to let him have clean clothes daily. Where this cannot be afforded, the clothes, as soon as they are taken off at night, ought to be well aired, so as to free them from the perspiration, and that they may be ready to put on the following morning. It is truly nonsensical to endeavor to harden a child, or any one else, by putting on damp clothes.

Keep the Head Cool.

The head ought to be kept cool; caps, therefore, are unnecessary. If caps be used at all, they should only be worn for the first month in summer, or for the first two or three months in winter. If a babe take to caps, it requires care in leaving them off, or he will catch cold. When you are about discontinuing them, put a thinner and a thinner one on every time they are changed, until you leave them off altogether. But remember, our opinion is that a child is better without caps; they only heat his head, cause undue perspiration, and thus make him more liable to catch cold.

In winter-time when a child is out for exercise, be sure that he is well wrapped up. He ought to have under his cloak a knitted

worsted jacket, which should button behind ; and if the weather be very cold, a shawl over all ; and, provided it be dry above, and the wind be not in the east or in the northeast, he may then brave the weather. He will then come from his walk refreshed and strengthened, for cold air is an invigorating tonic.

At what age ought an infant's clothing to be shortened? This, of course, will depend upon the season. In the summer, the right time "for shortening a babe," as it is called, is at the end of two months ; in the winter, at the end of three months. But if the right time for "shortening" a child should happen to be in the spring, let it be deferred until May. The springs are very trying and treacherous, and sometimes in April the weather is almost as cold and the wind as biting as in winter. It is treacherous, for the sun is hot, and the wind, which is at this time of the year frequently easterly, is keen and cutting. We would far prefer "to shorten" a child in the winter than in the early spring.

CHAPTER XXI.

DIET FOR THE INFANT.

Away with Gruel—When the Tongue is Tied—First Food for the Infant—Both Breasts to be Drawn Alike—Too Frequent Nursing—Artificial Food—A Simple Preparation—Foods of Various Kinds—Baked Flour—Bread Crumbs—Oatmeal—Pulp of Rice—Foods Containing Starch—Arrow-root—New Milk—When to Give Farinaceous Food—How Digestion is Aided—Salt and Sugar—Weak Mothers—No Real Substitute for Mother's Milk—Nursing and the Mother's Health—Care of the Feeding-bottle—Flatulence—Time for Weaning—Gin and Peppermint—Diet Versus Physic.

AN infant ought to be put to the breast soon after birth—the interest, both of the mother and of the child, demands it. It will be advisable to wait three or four hours, that the mother may recover from her fatigue, and then the babe must be put to the breast. If this be done, he will generally take the nipple with avidity.

It might be said, at so early a period, that there is no milk in the breast; but such is not usually the case. There generally is a little from the very beginning, which acts on the baby's bowels like a dose of purgative medicine, and appears to be intended by nature to cleanse the system. But, provided there be no milk at first, the very act of sucking not only gives the child a notion of sucking, but, at the same time, causes a draught (as it is usually called) in the breast, and enables the milk to flow easily.

Of course, if there be no milk in the breast—the babe having been applied once or twice to determine the fact—then you must wait for a few hours before applying him again to the nipple, that is to say, until the milk be secreted.

An infant, who, for two or three days, is kept from the breast, and who is fed upon gruel, generally becomes feeble, and frequently, at the end of that time, will not take the nipple at all. Besides, there is a thick cream which, if not drawn out by the child, may cause inflammation and gathering of the breast, and consequently great suffering

to the mother. Moreover, placing him early to the breast, moderates the severity of the mother's after-pains, and lessens the risk of her flooding. A new-born babe must not have gruel given to him, as it disorders the bowels, causes a disinclination to suck, and thus makes him feeble.

Tongue-Tied Infants.

If an infant show any disinclination to suck, or if he appear unable to apply his tongue to the nipple, immediately call the attention of the doctor to the fact, in order that he may ascertain whether the child be tongue-tied. If he be, the simple operation of dividing the bridle of the tongue will remedy the defect, and will cause him to take the nipple with ease and comfort.

Provided there be not milk at first, wait with patience; the child (if the mother have no milk) will not, for at least twelve hours, require artificial food. In the generality of instances, then, artificial food is not at all necessary; but if it should be needed, one-third of new milk and two-thirds of warm water, slightly sweetened with loaf sugar (or with brown sugar, if the babe's bowels have not been opened), should be given, in small quantities at a time, every four hours, until the milk be secreted, and then it must be discontinued. The infant ought to be put to the nipple every four hours, but not oftener, until he be able to find nourishment.

If, after the application of the child for a few times, he is unable to find nourishment, then it will be necessary to wait until the milk be secreted. As soon as it is secreted, he must be applied with great regularity, alternately to each breast.

We say alternately to each breast. This is most important advice. Sometimes a child, for some inexplicable reason, prefers one breast to the other, and the mother, to save a little contention, concedes the point, and allows him to have his own way. And what is frequently the consequence? A gathered breast. We frequently hear of a babe having no notion of sucking. This "no notion" may generally be traced to bad management, to stuffing him with food, and thus giving him a disinclination to take the nipple at all.

A mother generally suckles her baby too often, having him almost constantly at the breast. This practice is injurious both to parent and to child. The stomach requires repose as much as any other part of the body; and how can it have if it be constantly loaded with breast-milk? For the first month, he ought to be suckled about every hour and a half; for the second month, every two hours—gradually increasing, as he becomes older, the distance of time between, until at length he has it about every four hours.

If a baby were suckled at stated periods, he would only look for the breast at those times, and be satisfied. A mother is frequently in the habit of giving the child the breast every time he cries, regardless of the cause. The cause too frequently is, that he has been too often suckled—his stomach has been overloaded; the little fellow is consequently in pain, and he gives utterance to it by cries. How absurd is such a practice! We may as well endeavor to put out a fire by feeding it with fuel. An infant ought to be accustomed to regularity in everything, in times for sucking, for sleeping, etc. No children thrive so well as those who are thus early taught.

Artificial Food.

Where the mother is moderately strong artificial food must not, for the first five or six months, be given; of course, if she be feeble, a little food will be necessary. Many delicate women enjoy better health whilst suckling than at any other period of their lives.

It may be well, where artificial food, in addition to the mother's own milk, is needed, and before giving any farinaceous food whatever (for farinaceous food until a child is six or seven months old is injurious), to give, through a feeding-bottle, every night and morning, in addition to the mother's breast of milk, the following Milk-Water-and-Sugar-of-Milk Food:

Fresh milk, from ONE cow;
Warm water, of each a quarter of a pint,
Sugar-of-milk, one teaspoonful.

The sugar-of-milk should first be dissolved in the warm water, and

then the fresh milk, unboiled, should be mixed with it. The sweetening of the above food with sugar-of-milk, instead of with lump sugar, makes the food more to resemble the mother's own milk. The infant will not, probably, at first take more than half of the above quantity at a time, even if he does so much as that ; but still the above are the proper proportions ; and as he grows older, he will require the whole of it at a meal.

Substitutes for Breast Nourishment.

What food, when a babe is six or seven months old, is the best substitute for a mother's milk ?

The food that suits one infant will not agree with another. The one most generally useful is made as follows : Boil the crumb of bread for two hours in water, taking particular care that it does not burn ; then add only a little lump sugar (or brown sugar, if the bowels be costive) to make it palatable. When he is six or seven months old, mix a little new milk—the milk of ONE cow—with it gradually as he becomes older, increasing the quantity until it be nearly all milk, there being only enough water to boil the bread ; the milk should be poured boiling hot on the bread.

Sometimes the two milks—the mother's and the cow's milk—do not agree ; when such is the case, let the milk be left out, both in this and in the foods following, and let the food be made with water, instead of with milk and water. In other respects, until the child is weaned, let it be made as above directed ; when he is weaned, good fresh cow's milk MUST, as previously recommended, be used.

Or cut thin slices of bread into a basin, cover the bread with cold water, place it in an oven for two hours to bake ; take it out, beat the bread up with a fork, and then slightly sweeten it. This is an excellent food.

Another good food is the following : Take about a pound of flour, put it in a cloth, tie it up tightly, place it in a saucepanful of water, and let it boil for four or five hours ; then take it out, peel off the outer rind, and the inside will be found quite dry, which grate.

Another way of preparing an infant's food, is to bake flour—biscuit flour—in a slow oven, until it be of a light fawn color. Baked flour ought, after it is baked, to be reduced, by means of a rolling-pin, to a fine powder, and should then be kept in a covered tin, ready for use.

An excellent food for a baby is baked crumbs of bread. The manner of preparing it is as follows : Crumb some bread on a plate ; put it a little distance from the fire to dry. When dry, rub the crumbs in a mortar, and reduce them to a fine powder ; then pass them through a sieve. Having done which, put the crumbs of bread into a slow oven, and let them bake until they be of a light fawn color. A small quantity either of the boiled, or of the baked flour, or of the baked crumb of bread, ought to be made into food, in the same way as gruel is made, and should then be slightly sweetened, according to the state of the bowels, either with lump or with brown sugar.

Nourishing and Delicious.

Baked flour sometimes produces constipation ; when such is the case, an excellent authority wisely recommends a mixture of baked flour and prepared oatmeal, in the proportion of two of the former and one of the latter. He says : “ To avoid the constipating effects, I have always had mixed, before baking, one part of prepared oatmeal with two parts of flour ; this compound I have found both nourishing and regulating to the bowels. One tablespoonful of it mixed with a quarter of a pint of milk, or milk and water, when well boiled, flavored and sweetened with white sugar, produces a thick, nourishing and delicious food for infants or invalids.”

He goes on to remark : “ I know of no food, after repeated trials, that can be so strongly recommended by the profession to all mothers in the rearing of their infants, without or with the aid of the breasts, at the same time relieving them of much draining and dragging whilst nursing with an insufficiency of milk, as baked flour and oatmeal.”

An excellent food may be made with rusks, boiled for an hour in water, which ought then to be well beaten up by means of a fork, and slightly sweetened with lump sugar.

Another is, the top crust of a baker's loaf, boiled for an hour in water, and then moderately sweetened with lump sugar. It, at any time, the child's bowels should be costive, raw must be substituted for lump sugar.

Good wheat flour will also be found suitable. Francatelli, Queen Victoria's cook, gives the following formula for making it: "To one dessertspoonful of the flour, mixed with a wineglassful of cold water, add half a pint of boiling water; stir over the fire for five minutes; sweeten lightly, and feed the baby; but if the infant is being brought up by the hand, this food should then be mixed with milk—not otherwise."

Rice Recommended.

The following is a good and nourishing food for a baby: Soak for an hour some best rice in cold water; strain, and add fresh water to the rice; then let it simmer till it will pulp through a sieve; put the pulp and the water in a saucepan, with a lump or two of sugar, and again let it simmer for a quarter of an hour; a portion of this should be mixed with one-third of fresh milk, so as to make it of the consistence of good cream. This is an excellent food for weak bowels.

When the baby is six or seven months old, new milk should be added to any of the above articles of food, in a similar way to that recommended for boiled bread.

For a delicate infant, lentil powder is invaluable. It ought to be made into food, with new milk, in the same way that arrow-root is made, and should be moderately sweetened with loaf sugar. Whatever food is selected ought to be given by means of a nursing-bottle.

If a child's bowels be relaxed and weak, or if the motions be offensive, the milk must be boiled, but not otherwise. The following is a good food when an infant's bowels are weak and relaxed: Into five large spoonfuls of the purest water, rub smooth one dessertspoonful of fine flour. Set over the fire five spoonfuls of new milk, and put two bits of sugar into it; the moment it boils, pour into it the flour and water, and stir it over a slow fire twenty minutes.

Where there is much emaciation, we have found genuine arrow-

root a very valuable article of food for an infant, as it contains a great deal of starch, which starch helps to form fat and to evolve caloric (heat), both of which a poor, emaciated, chilly child stands so much in need of. It must be made with equal parts of water and of good fresh milk, and ought to be slightly sweetened with loaf sugar; a small pinch of table salt should be added to it.

Arrow-root will not, as milk will, give bone and muscle, but it will give—what is very needful to a delicate child—fat and warmth. Arrow-root, as it is principally composed of starch, comes under the same category as cream, butter, sugar, oil and fat. Arrow-root, then, should always be given with new milk (mixed with one-half of water); it will then fulfill, to perfection, the exigencies of nourishing, of warming and fattening the child's body.

New milk, composed in due proportions, as it is, of cream and of skim milk—the very acme of perfection—is the only food which, of itself alone, will nourish and warm and fatten. It is for a child, *par excellence*, the food of foods. Arrow-root and all other farinaceous foods are for a child only supplemental to milk—new milk being for the young the staple food of all kinds of foods whatever.

Age of the Child Must be Considered.

But bear in mind, and let there be no mistake about it, that farinaceous food, be it what it may, until the child be six or seven months old—until, indeed, he begin to cut his teeth—is not suitable for a child; until then, the milk-water-salt-and-sugar food, already recommended, is usually, if he be a dry-nursed child, the best artificial food for him. We have given you a large and well-tried infant's dietary to choose from, as it is sometimes difficult to fix on one that will suit; but, remember, if you find one of the above to agree, keep to it, as a babe requires a simplicity in food—a child a greater variety. Let us, in this place, insist upon the necessity of great care and attention being observed in the preparation of any of the above articles of diet. A babe's stomach is very delicate, and will revolt at either ill-made or lumpy or burnt food. Great care ought to be observed as to the

cleanliness of the cooking utensils. The above directions require the strict supervision of the mother.

Broths have been recommended, but, for our own part, we think that for a young infant they are objectionable; they are apt to turn acid on the stomach, and to cause flatulence and sickness; they, sometimes, disorder the bowels and induce griping and purging.

How Food is to be Given.

Whatever artificial food is used ought to be given by means of a bottle, not only as it is a more natural way than any other of feeding a baby, as it causes him to suck as though he were drawing it from the mother's breasts, but as the act of sucking causes the salivary glands to press out their contents, which materially assist digestion. Moreover, it seems to satisfy and comfort him more than it otherwise would do.

The food ought to be of the consistence of good cream, and should be made fresh. It ought to be given milk-warm. Attention must be paid to the cleanliness of the vessel, and care should be taken that the milk be that of one cow, and that it be new and of good quality; for, if not, it will turn acid and sour, and disorder the stomach, and will thus cause either flatulence or looseness of the bowels, or, perhaps, convulsions. The only way to be sure of having it from one cow is (if you have not a cow of your own) to have the milk from a respectable dairy, and to have it brought to your house in a can of your own. The better plan is to have two cans, and to have the milk fresh every night and morning. The cans, after each time of using, ought to be scalded out, and, once a week, the can should be filled with cold water, and the water should be allowed to remain in it until the can be again required.

The Kind of Seasoning.

Very little sugar should be used in the food, as much sugar weakens the digestion. A small pinch of table-salt ought to be added to whatever food is given, as "the best savor is salt." Salt is most whole-

some ; it strengthens and assists digestion, prevents the formation of worms, and, in small quantities, may with advantage be given (if artificial food be used) to the youngest baby.

Where it is found to be absolutely necessary to give an infant artificial food whilst suckling, how often ought he to be fed ?

Not oftener than twice during the twenty-four hours, and then only in small quantities at a time, as the stomach requires rest, and, at the same time, can manage to digest a little food better than it can a great deal. Let us again urge upon you the importance, if it be at all practicable, of keeping the child entirely to the breast for the first five or six months of his existence. Remember, there is no real substitute for a mother's milk ; there is no food so well adapted to his stomach ; there is no diet equal to it in developing muscle, in making bone, or in producing that beautiful, plump, rounded contour of the limbs ; there is nothing like a mother's milk alone in making a child contented and happy, in laying the foundation of a healthy constitution, in preparing the body for a long life, in giving him tone to resist disease, or in causing him to cut his teeth easily and well ; in short, the mother's milk is the greatest temporal blessing an infant can possess.

Delicate Mothers.

As a general rule, therefore, when the child and the mother are tolerably strong, he is better without artificial food until he have attained the age of three or four months ; then, it will usually be necessary to feed him with the milk-water-and-sugar-of-milk food twice a day, so as gradually to prepare him to be weaned (if possible) at the end of nine months.

When the mother is not able to suckle her infant herself, what ought to be done ?

It must first be ascertained, beyond all doubt, that a mother is not able to suckle her own child. Many delicate ladies do suckle their infants with advantage, not only to their offspring, but to themselves. "I will maintain," says Steele, "that the mother grows stronger by it, and will have her health better than she would have otherwise. Her

children will be like giants, whereas otherwise they are but living shadows, and like unripe fruit; and certainly if a woman is strong enough to bring forth a child, she is, beyond all doubt, strong enough to nurse it afterwards."

Nursing is a Healthy Process.

Many mothers are never so well as when they are nursing; besides, suckling prevents a lady from becoming pregnant so frequently as she otherwise would. This, if she be delicate, is an important consideration, and more especially if she be subject to miscarry. The effects of miscarriage are far more weakening than those of suckling.

If it be ascertained, past all doubt, that a mother cannot suckle her child, then, if the circumstances of the parents will allow—and they ought to strain a point to accomplish it—a healthy wet-nurse should be procured, as, of course, the food which nature has supplied is far, very far, superior to any invented by art. Never bring up a baby, then, if you can possibly avoid it, on artificial food. Remember, there is in early infancy no real substitute for either a mother's or a wet-nurse's milk. It is impossible to imitate the admirable and subtle chemistry of nature. The law of nature is, that a baby, for the first few months of his existence, shall be brought up by the breast; and nature's law cannot be broken with impunity. It will be imperatively necessary then—

"To give to nature what is nature's due."

Again, in case of a severe illness occurring during the first nine months of a child's life, what a comfort either the mother's or the wet-nurse's milk is to him; it often determines whether he shall live or die. But if a wet-nurse cannot fill the place of a mother, then ass's milk will be found the best substitute, as it approaches nearer, in composition, than any other animal's to human milk; but it is both difficult and expensive to obtain. The next best substitute is goat's milk. Either the one or the other ought to be milked fresh, and fresh when wanted, and should be given by means of a feeding-bottle. Ass's milk is more suitable food for a delicate infant.

If neither ass's milk nor goat's milk can be procured, then the following milk-water-salt-and-sugar food, from the very commencement, should be given :

New milk, the product of ONE healthy cow ;
Warm water, of each, equal parts ;
Table-salt, a few grains—a small pinch ;
Lump sugar, a sufficient quantity to slightly sweeten it.

The milk itself ought not to be heated over the fire, but should, as above directed, be warmed by the water ; it must, morning and evening, be had fresh. The milk and water should be of the same temperature as the mother's milk, that is to say, at about ninety degrees Fahrenheit. It ought to be given by means of a feeding-bottle, and care must be taken to scald the bottle out twice a day, for if attention be not paid to this point, the delicate stomach of an infant is soon disordered. The milk should, as he grows older, be gradually increased and the water decreased, until two-thirds of milk and one-third of water be used ; but remember, that either much or little water must always be given with the milk.

Where the above food does not agree (and no food except a healthy mother's own milk does invariably agree), substitute sugar-of-milk for the lump sugar, in the proportion of a teaspoonful of sugar-of-milk to every half-pint of food.

How to Prepare the Milk.

If your child bring up his food, and if the ejected matter be sour-smelling, we would advise you to leave out the sugar-of-milk altogether, and simply to let the child live, for a few days, on milk and water alone, the milk being of one cow, and in the proportion of two-thirds to one-third of warm water—not hot water ; the milk should not be scalded with hot water, as it injures its properties ; besides, it is only necessary to give the child his food with the chill just off. The above food, where the stomach is disordered, is an admirable one, and will often set the child to rights without giving him any medicine whatever. Moreover, there is plenty of nourishment in it to make

the babe thrive ; for after all it is the milk that is the important ingredient in all the foods of infants ; they can live on it, and on it alone, and thrive amazingly.

The reason of farinaceous food making babes, until they have commenced cutting their teeth, "windy," is that the starch of the farinaceous food (and all farinaceous foods contain more or less of starch) is not digested, and is not, as it ought to be, converted by the saliva into sugar ; hence, "wind" is generated, and pain and convulsions often follow in the train.

As Near as Possible to Nature.

The great desideratum, in devising an infant's formula for food, is to make it, until he be nine months old, to resemble as much as possible a mother's own milk ; and which our formula, as nearly as is practicable, does resemble ; hence its success and popularity. As soon as a child begins to cut his teeth the case is altered, and farinaceous food, with milk and with water, becomes an absolute necessity.

We wish, then, to call your especial attention to the following facts, for they are facts : Farinaceous foods of all kinds, before a child commences cutting his teeth (which is when he is about six or seven months old) are worse than useless—they are positively injurious ; they are, during the early period of infant life, perfectly indigestible, and may bring on—which they frequently do—convulsions. A babe fed on farinaceous food alone would certainly die of starvation ; for up to six or seven months of age, infants have not the power of digesting farinaceous or fibrinous substances.

A babe's salivary glands, until he be six or seven months old, does not secrete its proper fluid—namely, ptyalin—and consequently the starch of the farinaceous food, and all farinaceous food contains starch, is not converted into dextrine and grape-sugar, and is, therefore, perfectly indigestible and useless—nay, injurious to an infant, and may bring on pain and convulsions, and even death ; hence, the giving of farinaceous food, until a child be six or seven months old, is one of the principal causes of infant mortality.

In passing, allow us to urge you never to stuff a babe—never to overload his little stomach with food ; it is far more desirable to give him a little less than enough, than to give him a little too much. Many a poor child has been, like a young bird, killed with stuffing. If a child be at the breast, and at the breast alone, there is no fear of his taking too much ; but if he be brought up on artificial food, there is great fear of his overloading his stomach. Stuffing a child brings on vomiting and bowel complaints, and a host of other diseases which now it would be tedious to enumerate. Let us, then, urge you on no account to overload the stomach of a little child.

It is a common practice for a mother to cram herself with food, and to take strong ale to drink, to make good nourishment and plentiful milk. This practice is absurd ; for it either, by making her feverish, makes the milk more sparing than usual, or it causes the milk to be gross and unwholesome. On the other hand, we must not run into an opposite extreme. The mother, by using those means most conducive to her own health, will best advance the interest of her little charge.

It is a common remark that “a mother who is nursing may eat anything.” We do not agree with this opinion. Can impure or improper food make pure and proper milk, or can impure and improper milk make good blood for an infant, and thus good health ?

Directions for Weaning.

The time for weaning must depend both upon the strength of the child, and upon the health of the parent ; on an average, nine months is the proper time. If the mother be delicate, it may be found necessary to wean the infant at six months ; or if he be weak, or laboring under any disease, it may be well to continue suckling him for twelve months ; but after that time, the breast will do him more harm than good, and will, moreover, injure the mother's health, and may, if she be so predisposed, excite consumption.

How should a mother act when she weans her child ? She ought to do it gradually—that is to say, she should, by degrees, give him

less and less of the breast, and more and more of artificial food ; at length she must only suckle him at night ; and, lastly, it would be well for the mother either to send him away, or to leave him at home, and, for a few days, to go away herself.

A good plan is, for the nurse-maid to have a half-pint bottle of new milk—which has been previously boiled—in the bed, so as to give a little to him in lieu of the breast. The warmth of the body will keep the milk at a proper temperature, and will supersede the use of lamps, of candle-frames, and of other troublesome contrivances.

A Vicious Practice.

If a child be suffering severely from “wind,” it is a bad practice to add either gin or peppermint of the shops (which is oil of peppermint dissolved in spirits) to his food. Many children have, by such a practice, been made puny and delicate, and have gradually dropped into an untimely grave. An infant who is kept, for the first five or six months, entirely to the breast—more especially if the mother be careful in her own diet—seldom suffers from “wind ;” those, on the contrary, who have much or improper food, suffer severely.

Care in feeding, then, is the grand preventative of “wind ;” but if, notwithstanding all your precautions, the child be troubled with flatulence, the treatment recommended under the head of Flatulence, in a subsequent chapter, will generally answer the purpose.

A small quantity of sugar in an infant’s food is requisite, sugar being nourishing and fattening, and making cow’s milk to resemble somewhat in its properties human milk ; but, bear in mind, it must be used sparingly. Much sugar cloyes the stomach, weakens the digestion, produces acidity, sour belchings and wind :

“ Things sweet to taste prove in digestion sour.”

If a babe’s bowels be either regular or relaxed, lump sugar is the best for the purpose of sweetening his food ; if his bowels are inclined to be costive, raw sugar ought to be substituted for lump sugar, as raw sugar acts on a young babe as an aperient, and, in the generality of cases, is far preferable to physicking him with opening medicine.

CHAPTER XXII.

TEETHING.

Infants Sometimes Born with Teeth—Proper Time for Teething to Commence—Length of Time in Cutting—Lancing the Gums—Mode of Operation—Infantile Convulsions—Gums Injured by Various Substances—Rubber and Leather Rings—Sucking the Thumb—Diet of Fruit—Ailments During Teething—Painful Dentition—Mild Form—Treatment Recommended—The Tepid Bath—Relaxed Bowels—The “Tooth Cough”—Disastrous Effects of Opiates—Laudanum and Paregoric—Swollen Gums—Pain and Inflammation—Skin Blotches—Second Teeth—Parental Neglect.

THE period at which dentition or teething commences is uncertain. It may, as a rule, be said that a babe begins to cut his teeth at seven months old. Some have cut teeth at three months; indeed, there are instances on record of infants having been born with teeth. King Richard the Third is said to have been an example. Shakespeare notices it thus:

“YORK.—Marry, they say my uncle grew so fast,
That he could gnaw a crust at two hours old.
’Twas full two years ere I could get a tooth.
Grandam, this would have been a biting jest.”

When a babe is born with teeth, they generally drop out. On the other hand, teething, in some children, does not commence until they are a year and a half or two years old, and, in rare cases, not until they are three years old. There are cases recorded of adults who have never cut any teeth. Dentition has been known to occur in old age. A case is recorded by M. Carre, in the *Gazette Médicale de Paris*, September 15, 1860, of an old lady, aged eighty-five, who cut several teeth after attaining that age.

The first or temporary set consists of twenty. The first set of teeth are usually cut in pairs. Says that eminent authority, Sir Charles Locock: “I may say that nearly invariably the order is—first, the lower front incisors [cutting teeth], then the upper front, then the upper two lateral incisors, and that not uncommonly a double tooth is

cut before the two lower laterals ; but at all events the lower laterals come seventh and eighth, and not fifth and sixth, as nearly all books on the subject testify."

Then the first grinders, in the lower jaw, afterwards the first upper grinders, then the lower corner-pointed or canine teeth, after which the upper corner or eye-teeth, then the second grinders in the lower jaw, and lastly, the second grinders of the upper jaw. They do not, of course, always appear in this rotation. Nothing is more uncertain than the order of teething. A child seldom cuts his second grinders until after he is two years old. He is usually, from the time they first appear, two years in cutting his first set of teeth. As a rule, therefore, a child two years old has sixteen, and one two years and a half old, twenty teeth.

Lancing the Gums.

If an infant be either feverish or irritable, or otherwise poorly, and if the gums be hot, swollen, and tender, it may be necessary (not always) to have them lanced. By doing so the child will, in the generality of instances, be almost instantly relieved.

It has been stated that lancing the gums hardens them. This is a mistake—it has a contrary effect. It is a well-known fact that a part which has been divided gives way much more readily than one which has not been cut. Again, the tooth is bound down by a tight membrane, which, if not released by lancing, frequently brings on convulsions. If the symptoms be urgent, it may be necessary from time to time to repeat the lancing. It would, of course, be the height of folly to lance the gums unless they be hot and swollen, and unless the tooth, or the teeth, be near at hand. It is not to be considered a panacea for every baby's ill, although, in those cases where the lancing of the gums is indicated, the beneficial effect is sometimes almost magical.

Directions for Cutting the Gums.

The proper person, of course, to lance his gums is the physician. But if, perchance, you should be miles away and be out of the reach of one, it would be well for you to know how the operation ought to

be performed. Well, then, let him lie on the nurse's lap upon his back, and let the nurse take hold of his hands in order that he may not interfere with the operation.

Then, if it be the upper gum that requires lancing, you ought to go to the head of the child, looking over, as it were, and into his mouth, and should steady the gum with the index finger of your left hand; then, you should take hold of the gum-lancet with your right hand—holding it as if it were a table-knife at dinner—and cut firmly along the inflamed and swollen gum and down to the tooth, until the edge of the gum-lancet grates on the tooth. Each incision ought to extend along the ridge of the gum to about the extent of each expected tooth.

Not a Difficult Operation.

If it be the lower gum that requires lancing, you must go to the side of the child, and should steady the outside of the jaw with the fingers of the left hand, and the gum with the left thumb, and then you should perform the operation as before directed. Although the lancing of the gums, to make it intelligible to a non-professional person, requires a long description, it is, in point of fact, a simple affair, is soon performed, and gives but little pain.

A single word with reference to lancing the gums. This operation is, in almost all cases, unnecessarily performed, and in many cases it proves positively injurious. And yet it sometimes affords the most important and immediate relief. Where the gums are red and inflamed, in our opinion they never need to be lanced, but only when in their very slow growth they have changed to a dense, firm, and unyielding cartilaginous formation, thick and of a whitish color, through which the teeth vainly attempt to make their way, and the irritation of the child's system threatens to destroy its life by sheer exhaustion, or by inducing fatal convulsions.

How to Treat Convulsions.

If teething cause convulsions the first thing to be done, after sending for the doctor, is to freely dash water upon the face and to sponge the head with cold water, and as soon as warm water can be procured,

to put him into a warm bath of 98 degrees Fahrenheit. If a thermometer be not at hand, you must plunge your own elbow into the water; a comfortable heat for your elbow will be the proper heat for the infant. He must remain in the bath for a quarter of an hour, or until the fit be at an end.

The body must, after coming out of the bath, be wiped with warm and dry and coarse towels; he ought then to be placed in a warm blanket. The gums must be lanced, and cold water should be applied to the head. An enema, composed of table-salt, of olive oil, and warm oatmeal gruel—in the proportion of one tablespoonful of salt to one of oil, and a teacupful of gruel—ought then to be administered, and should, until the bowels have been well opened, be repeated every quarter of an hour.

It may be well, for the comfort of a mother, to state that a child in convulsions is perfectly insensible to all pain whatever; indeed, a return to consciousness speedily puts convulsions to the rout.

Gums Injured by Hard Substances.

We think it a bad practice to give a child any hard, unyielding substance, as it tends to harden the gums, and, by so doing, causes the teeth to come through with greater difficulty. Softer substances, such as either a piece of wax taper, or an india-rubber ring, or a piece of the best bridle leather, or a crust of bread, are of great service. If a piece of crust be given as a gum-stick, he must, while biting it, be well watched, or by accident he might loosen a large piece of it, which might choke him. The pressure of any of these excites a more rapid absorption of the gum, and thus causes the tooth to come through more easily and quickly.

There is an unfounded prejudice against a child's sucking its thumb. The thumb is the best gum-stick in the world; it is convenient, it is handy (in every sense of the word), it is of the right size, and of the proper consistence, neither too hard nor too soft; there is no danger, as of some artificial gum-sticks, of its being swallowed, and thus of its choking the child.

The sucking of the thumb causes the salivary glands to pour out their contents, and thus not only to moisten the dry mouth, but assist the digestion; the pressure of the thumb eases, while the teeth are "breeding" the pain and irritation of the gums, and helps, when the teeth are sufficiently advanced to bring them through the gums. Sucking of the thumb will often make a cross infant contented and happy, and will frequently induce a restless babe to fall into a sweet refreshing sleep. Truly may a thumb be called a baby's comfort.

How the Habit May be Cured.

But if an infant be allowed to suck his thumb, will it not be likely to become a habit, and stick to him for years—until, indeed, he become a big boy?

After he has cut the whole of his first set of teeth, that is to say, when he is about two years and a half old, he might, if it be likely to become a habit, be readily cured by the following method, namely, by making a paste of aloes and water, and smearing it upon his thumb. One or two dressings will suffice, as, after just tasting the bitter aloes, he will take a disgust to his former enjoyment, and the habit will at once be broken.

Many persons have an objection to children sucking their thumbs, as for instance :

"Perhaps it's as well to keep children from plums,
And from pears in the season, and sucking their thumbs."

Our reply is:

P'rhaps 'tis as well to keep children from pears;
The pain they might cause, is oft followed by tears;
'Tis certainly well to keep them from plums;
But certainly not from sucking their thumbs!
If a babe suck his thumb
'Tis an ease to his gum;
A comfort; a boon; a calmer of grief;
A friend in his need—affording relief;
A solace; a good; a soother of pain;
A composer to sleep; a charmer and a gain.

'Tis handy, at once, to his sweet mouth to glide ;
When done with, drops gently down by his side ;
'Tis fixed like an anchor, while the babe sleeps,
And the mother, with joy, her still vigil keeps.

A child who is teething dribbles, and thereby wets his chest, which frequently causes him to catch cold. Have in readiness to put on several flannel dribbling-bibs, so that they may be changed as often as they become wet ; or, if he dribble very much, the oiled-silk dribbling-bibs, instead of flannel ones, may be used, and which may be procured at any baby-linen warehouse.

Effect of Fruit upon the Child.

In teething, give no fruit, unless it be a few ripe strawberries or raspberries, or a roasted apple, or the juice of five or six grapes—taking care that he does not swallow either the seeds or the skin—or the inside of an orange. Such fruits, if the bowels be in a costive state, will be particularly useful.

All stone fruit, raw apples or pears, ought to be carefully avoided, as they not only disorder the stomach and the bowels—causing convulsions, gripings, etc.—but they have the effect of weakening the bowels.

Is a child, during teething, more subject to disease, and, if so, to what complaints, and in what manner may they be prevented ?

The teeth are a fruitful source of suffering and of disease, and are with truth styled “our first and our last plagues.” Dentition is the most important period of a child's life, and is the exciting cause of many infantile diseases ; during this period, therefore, he requires constant and careful watching. When we consider how the teeth elongate and enlarge in his gums, pressing on the nerves and on the surrounding parts, and thus how frequently they produce pain, irritation and inflammation ; when we further contemplate what sympathy there is in the nervous system, and how susceptible the young are to pain, no surprise can be felt at the immense disturbance, and the consequent suffering and danger frequently experienced by children while cutting their first set of teeth.

The complaints or the diseases induced by dentition are numberless, affecting almost every organ of the body—the brain, occasioning convulsions, water on the brain, etc.; the lungs, producing congestion, inflammation, cough, etc.; the stomach, exciting sickness, flatulence, acidity, etc.; the bowels, inducing griping, at one time costiveness, and at another time purging; the skin, causing “breakings-out.”

To prevent these diseases, means ought to be used to invigorate a child's constitution by plain, wholesome food, as recommended under the chapter on diet: by exercise and fresh air; by allowing him, weather permitting, to be out of doors a great part of every day; by lancing the gums only as above directed; by attention to the bowels, and if he suffer more than usual, by keeping them rather in a relaxed state by any simple aperient; and, let us add, by attention to his temper; many children are made feverish and ill by petting and spoiling them.

Painful Teething.

Painful dentition may be divided into two forms—(1) the mild, and (2) the severe. In the mild form the child is peevish and fretful, and puts his fingers, and everything within reach, to his mouth; he likes to have his gums rubbed, and takes the breast with avidity; indeed, it seems a greater comfort to him than ever. There is generally a considerable flow of saliva, and he has frequently a more loose state of bowels than is his wont.

Now, with regard to the more severe form of painful dentition: The gums are red, swollen and hot, and he cannot, without expressing pain, bear to have them touched; hence, if he be at the breast, he is constantly losing the nipple. There is dryness of the mouth, although before there had been a great flow of saliva. He is feverish, restless, and starts in his sleep. His face is flushed. His head is heavy and hot. He is sometimes convulsed. He is frequently violently griped and purged, and suffers severely from flatulence. He is predisposed to many and severe diseases. The young of animals seldom suffer from cutting their teeth—and what is the reason?

Because they live in the open air, and take plenty of exercise ; while children are frequently cooped up in close rooms, and are not allowed the free use of their limbs.

Remedies Recommended.

The treatment of the mild form of painful dentition consists of friction of the gum with the finger ; a tepid-bath of about 92 degrees Fahrenheit, every night at bedtime ; attention to diet and to bowels ; fresh air and exercise. For the mild form, the above plan will usually be all that is required. If he dribble, and the bowels be relaxed, so much the better ; the flow of saliva and the increased action of the bowels afford relief, and, therefore, must not be interfered with. In the mild form, lancing of the gums is not desirable. The gums ought not to be lanced, unless the teeth be near at hand, and unless the gums be red, hot, swollen and hard.

In the severe form a doctor should be consulted early, as more energetic remedies will be demanded ; that is to say, the gums will require to be freely lanced, warm baths to be used, and medicines to be given, to ward off mischief from the head, from the chest, and from the stomach.

If you are living in the town, and your baby suffers much from teething, take him into the country. It is wonderful what change of air to the country will often do in relieving a child who is painfully cutting his teeth. The number of deaths in cities, from teething, is frightful ; it is in the country comparatively trifling.

Nature Tries to Take Care of Itself.

Relaxation of the bowels should be looked upon as an effort of nature to relieve itself. A child is never purged without a cause ; that cause, in the generality of instances, is the presence of either some undigested food, or acidity, or depraved motions, that want a vent.

If we lock up the bowels, we confine the enemy, and thus produce mischief. If he be purged more than usual, attention should be paid

to the diet—if it be absolutely necessary to give him artificial food while suckling—and care must be taken not to overload the stomach.

A child is subject to a slight cough during dentition—called by nurses “tooth-cough”—which a parent would not consider of sufficient importance to consult a doctor about, but do not give any narcotic, any opiate.

What the Cough Means.

A cough is an effort of nature to bring up any secretion from the lining membrane of the lungs, or from the bronchial tubes, hence it ought not to be interfered with. We have known the administration of syrup of white poppies, or of paregoric, to stop the cough, and thereby to prevent the expulsion of the phlegm, and thus to produce either inflammation of the lungs or bronchitis. Moreover, both paregoric and other narcotics are, for a young child, dangerous medicines (unless administered by a judicious doctor), and ought never to be given by a mother.

Bear in mind that the development of teeth in their regular order, although a perfectly natural process, is often attended with much suffering. When dentition is slow, retarded and difficult, it not only becomes of itself a serious disorder, but it involves also a long train of morbid symptoms and actual diseases which may exhaust the patient's strength, and finally destroy its life. The primary difficulty in such cases is in the nutrition, and as we often see in older children a remarkable backwardness in the development of the osseous (bone) system in general, so we often find in earlier periods of infantile life a corresponding slowness in the development of the teeth. And both these forms of imperfect development, occurring, as they often do, successively in the same children, are to be attributed to some profound constitutional taint which affects the nutrition.

Swollen and Painful Gums.

In some few cases the teeth come through so readily as to scarcely disturb the infant; but more frequently, indeed, the mouth becomes hot and the gums look tumid, tense and shining, while the exact

position of the tooth is marked sometimes before its appearance, by the prominence of the gum; or the irruption of the teeth is preceded or accompanied by a somewhat different condition of the mouth, in which there is much heat and intense redness of the mucous membrane, an extremely copious flow of saliva, and a disposition to the formation of small aphthous ulcers on the tongue and on the inside of the lips, though the gums themselves may not be particularly swollen and painful.

Either of these states is usually attended with some degree of febrile disturbance, and apparently with considerable suffering to the infant, who is constantly fretful and peevish, or cries out occasionally as if in pain. A third morbid condition of the mouth is sometimes seen, which is usually ushered in or attended by very considerable fever. The gums then become extremely hot and swollen, and unusually tender, especially over some tooth or other in particular; and in that situation we find the gum swollen up into a kind of little tumor. Small unhealthy ulcerations with a sloughy appearance often form upon the summit of the gum, and especially around any tooth which has partially pierced through it. To this affection, which is often very painful and difficult of cure, the name of *odontitis infantum* has been applied.

Teeth a Natural Growth.

The tooth does not mechanically cut its way out of the gum, but its growth causes slight pressure by the crown of the tooth, a pressure which excites the absorbents to remove the impediment. In this manner, the absorbents do absolutely, when the infant is in a perfectly healthy condition, open up the way for the tooth to escape without pain or suffering.

Now, the duty of the physician, or the one acting as such, is so to direct the course of events, that the evolution of the teeth shall become as painless as any other process of development. All the laws of health should be rigidly enforced, and every prescription carefully made, and, finally, when the period of dentition fairly commences, if difficulty arises, remedies should be administered.

A child who is teething is subject to a "breaking-out," more especially behind the ears, which is most disfiguring, and frequently very annoying.

Apply no external application to cure it, as you should look upon it as an effort of the constitution to relieve itself; and should expect, if the "breaking-out" were repelled, that either convulsions, or bronchitis, or inflammation of the lungs, or water on the brain, would be the consequence. The only plan to adopt is to be more careful in his diet; to give him less meat (if he be old enough to eat animal food), and regulate his bowels; and, if the irritation from the "breaking-out" be great, to bathe it, occasionally, either with a little warm milk and water, or with rose-water.

Second Teeth.

Generally at about the age of seven a child cuts his second set of teeth. He begins to cut them at about that time; but it should be borne in mind that the second crop of teeth, in embryo, is actually bred and formed from the very commencement of his life, under the first tier of teeth, but which remain in abeyance for years, and do not come into play until the first teeth, having done their duty, loosen and fall out, and thus make room for the more numerous, larger, stronger, and more permanent teeth, which latter have to last for the remainder of his existence. The first set is sometimes cut with a great deal of difficulty, and produces various diseases; the second, or permanent teeth, come easily, and are unaccompanied with any disorder.

We would recommend you to pay particular attention to the teeth of your children; for, besides their being ornamental, their regularity and soundness are of great importance to the present as well as to the future health of your offspring. If there be any irregularity in the appearance of the second set, lose no time in consulting an experienced and reputable dentist.

CHAPTER XXIII.

DISEASES OF CHILDREN.

Inflammation of the Eyes—Hiccough and its Treatment—Snuffles, or Cold in the Head—Remedies for Cold—Colic and What to Do for It—Rules for Diet—Indigestion and Vomiting—Flatulence—Milk-crust, or Scabs—Thrush, and How to Overcome It—Costiveness—Diarrhoea—Cholera Infantum—A Dangerous Ailment—Full List of Remedies for Summer Complaint—Alarming Symptoms—Stupor and Convulsions—Standard Treatment—Asthma—Result of Cold—Importance of Prompt Relief—Vaccination—Transmission of Disease—Vaccination Should be Repeated.

NEWBORN infants and other children are subject to purulent ophthalmia, or inflammation of the eyes. This disorder is always more or less serious, for, unless speedily cured, the inflammation may result in ulceration, and the contents of the eyeballs be discharged, causing permanent deformity as well as hopeless blindness. The first indication of the disease is, generally, the eyelids becoming glued together during sleep, with redness and swelling externally.

The causes are: sudden exposure to the light of day, to cold, or the glare of a lamp or fires. Many cases of inflammation of the eyes occur in babes whose mothers are affected with leucorrhœa; therefore, we must conclude a discharge from the genitals of the mother is a very frequent cause of ophthalmia in newborn infants, or it is sometimes epidemic, and no doubt many children who are what is commonly called "born blind," owe their misfortune to the neglect of proper precaution, in many cases the external indications of this affection being so slight as to escape observation.

The eye is an organ so delicate, and the importance of proper, judicious treatment for any of its ailments is so great, that a skillful oculist should at all times be consulted. The treatment should be in part constitutional, removing all causes that impair the general health of the child. Indeed, this is an invariable rule in the effort to remedy any local ailment. The trouble can often be made to disappear wher

good general health is established. The following remedies, however, may, with safety, be used in cases of ophthalmia :

Aconite should be administered as soon as we become aware of the existence of this evil ; a few doses will generally be found sufficient to subdue this affection in all mild cases. *Dose* : Two pills every four hours.

Belladonna. The eyes look very red ; cannot bear the light ; opening the eyes only when in a dark place. This remedy is good to alternate with Aconite. *Dose* : As for *Aconite*.

HICCOUGH.

This affection, though in itself of slight importance, frequently causes a considerable degree of uneasiness to the young mother. It generally arises from exposure of the body, even in a warm room, to currents of air, even during the operation of dressing and undressing the newborn child.

Wrapping the infant warm in bed, or better still, applying it to the breast, will generally lead to a cessation of the affection ; should it, however, continue, the administration of a small quantity of white sugar, as much as will cover the end of a teaspoon, dissolved in a teaspoonful of water, will frequently effectually remove the evil.

Nux Vomica. Two pills placed in the mouth of the infant will arrest the trouble, if the other advice should fail.

Allopathic Treatment.

Hiccough is generally relieved by a sudden arrest of the attention as by a reproof or a sudden expression of great surprise. Hot cloths wrung out of warm or hot water may be continually applied, or a mustard and flaxseed poultice laid over the region of the diaphragm. The common internal remedies are cold water, snow, pounded ice or ice cream. Anodyne and antispasmodic drugs are useful in this as in other coughs.

A combination of Chloral, Bromide of Potassium, with or without an opiate, is generally effectual. Take of Hydrate of Chloral and

Bromide of Potassium and Bicarbonate of Potash, one scruple, Paregoric, two drachms. Peppermint Water sufficient to make two ounces. Mix. *Dose*: A teaspoon, half full, to a dessertspoonful, every two or three hours. Obstinate cases will require professional advice.

SNUFFLES, OR COLD IN THE HEAD.

Snuffles, or cold in the head, is one of the earliest and most common affections of the young infant. It consists of an inflammation of the mucous lining of the nose. The first that is known of it is, that the infant's nose is stopped up so as to hinder its breathing, hindering it in the action of sucking, by not allowing the breath to pass through the nostrils, obliging the infant to release the nipple in order to breathe, causing it to become fretful and irritable.

While this state continues, it has its influence against the infant's thriving, both by hindering it from taking a sufficient amount of nourishment, and by annoying the breathing of the child so as to disturb its sleep. When the nose is dry while administering a remedy, to remove the evil, relief may be obtained by oiling the nose on the outside and by using a feather or camel's-hair pencil on the inside. Fresh lard, goose grease, cream, or a little breast milk will often afford grateful relief.

Treatment.

Aconite. This remedy, if administered at first, when there are febrile indications, will often cut short an attack of snuffles. *Dose*: Two globules every two hours.

Nux. The trouble is worse at night, particularly toward morning or in the morning. Through the night the nose is very dry. *Dose*: As for *Aconite*.

Euphrasia. Profuse, fluent discharge and acrid discharge from the eyes; the eyes are much involved. *Dose*: As for *Aconite*.

Chamomilla. Where there is watery or mucus discharge; the child is quieted by carrying it up and down the room. One cheek red the other pale. *Dose*: As for *Aconite*.

Pulsatilla is indicated by thick, green or yellow bloody matter, like

discharge from the nose, attended with frequent sneezing. Worse towards evening. *Dose*: As for *Aconite*.

Allopathic Treatment.

Cold in the head generally requires but little more than maintaining an equal temperature for a few days, when it naturally subsides. It is necessary to keep the nostrils open that the child may nurse.

For this purpose, the nostrils may be moistened with Glycerine, applied with a camel's-hair pencil. Nurses are in the habit of provoking sneezing by dropping milk into the nostril, so clearing it out, and smearing the nose with Olive or Almond Oil. A very useful application when the discharge tends to continue, is Tannin, fifteen grains, Fluid Extract of Belladonna, twenty drops, Glycerine, two drachms. Mix, and apply with a camel's-hair pencil, two or four times a day, after first cleansing the nostril with a camel's-hair brush and warm water.

If the discharge is offensive, a solution of one or two grains of Permanganate of Potash to the ounce should be used to cleanse the nostril. In chronic cases, the above mixture of Tannin may be used alternately with the dry powder, or a solution of Alum, five grains to the ounce, may be employed.

If the disease depends on scrofula, the following mixture may be given: Take of Iodide of Potassium, sixteen grains, Pyrophosphate of Iron, ten grains, water sufficient to make a solution, Syrup of Peppermint, sufficient to make two ounces. Mix. *Dose*: A teaspoon, half full, to a teaspoonful, three times a day. Or three to five drops of the syrup of the Iodide of Iron may be given.

CRYING AND WAKEFULNESS—COLIC.

Occasional crying of newborn children is a wise provision to bring the respiratory organs into play, and to expand the chest. When, however, the crying becomes excessive and threatens to prove injurious, we must, in the first place, endeavor to discover its origin, which will frequently be found in some derangement in the infant's dress, a

wet diaper or tight bandage, or perhaps it may feel thirsty and would like to be refreshed by a little cold water. Care and love will easily detect the cause of the child's cries, and a good, true mother will scarcely ever lose her patience at such times. Sleeplessness is often caused by similar circumstances; the children sometimes lie with their heads too high, or they are too warm, or they are sometimes affected by nursing their mother when she is in a nervous and excited condition; all these things must be considered.

Treatment.

Belladonna will frequently be found sufficient to remove the evil when no exciting cause or guiding symptoms of disease present themselves, and the infant is peevish and irritable, affected with incessant whimperings and wakefulness, or prolonged fits of crying. The infant's face looks somewhat flushed. *Dose*: Two pills every three hours until relief or change.

Chamomilla is of very great service, when the child appears to have griping pain (colic), indicated by drawing up the limbs, contortions of the body and face; or when there is a yellowish, greenish watery discharge from the bowels, the child wants to be carried all the time. *Dose*: As for *Belladonna*.

Allopathic Treatment.

Crying, when not dependent on hunger, fright, willfulness, or peevishness, is generally dependent on dyspeptic colic. The cries are loud and may be long. Whimpering, moaning, painful cries, depend on inflammatory or exhausting diseases. The smothered cry depends on true or false croup. The treatment, therefore, will have reference to the causative conditions. The use of soothing syrups is not free from danger, as they contain a secret amount of Morphine, which is an unsafe drug to give to children. Simple restlessness may be relieved by two to five-grain doses of Bromide of Potassium dissolved in syrup.

When necessary to give an anodyne it is best to give Paregoric,

the doses of which are on the printed label, suited to the age. It can be given with the Bromide of Potassium, or an equal amount of Tincture of Hyoscyamus. But rather than by any drugs, should relief be obtained by correcting whatever derangement causes the crying.

Colic may be temporarily relieved by a dose of Paregoric suited to the age, given at suitable intervals of from half an hour to longer intervals, until the pain is relieved. Warm cloths or poultices, over the abdomen are useful. The principal treatment consists in correcting the derangement of the stomach and bowels. Irritation from unsuitable milk is a frequent cause, as is noticed at the period of menstruation during lactation; the occurrence of another pregnancy, violent mental emotions, hard exhausting labor, errors of diet, or some other causes which render the breast milk unsuitable.

These causes suggest their own change. If the amount or quality of the breast milk is insufficient, the trouble will be relieved by proper artificial feeding. An excess of acidity in the stomach, as shown by sour eructations (belchings), sour and greenish stools, scattered sometimes with lumps of undigested material, call for alkalies sufficient to correct these symptoms. The best is Bicarbonate of Soda, in doses of one or two grains, or teaspoonful doses of Lime Water, given often enough to correct the sourness (acidity). Two to five-grain doses of Pepsin, with an equal quantity of Bismuth, may be given three or four times a day.

The Diet Must Be Regulated.

The regulation of the diet to the exact wants of the system is the most important part of the treatment. This will have to be accomplished somewhat by experiment. The milk for artificial, as tested by litmus paper, should be alkaline, and not used until sufficient Lime Water or Soda is added to make it so. It should be perfectly fresh, and kept on ice to prevent any decomposition (souring), or if this is impossible, and it cannot be freshly milked each time it is used, scalding will help to keep it, and is in this case permissible.

The juice of lean meat may frequently be given instead of milk, with advantage, or raw lean beef, chopped fine, and ground in a

mortar, and strained through a sieve, may be salted or sweetened, and fed a teaspoonful at a meal. It will frequently be digested when milk will not.

In other children, the treatment will be the same for the relief of pain. If the irritating matter is not removed by a free, loose stool, a teaspoonful or a dessertspoonful of Castor Oil (mixed with an equal quantity of inodorous glycerine, and flavored with a couple of drops of Oil of Wintergreen or Cinnamon, to make it palatable), should be given.

INDIGESTION AND VOMITING.

The infant, the same as the adult, is subject to attacks of indigestion, and the disorder in the one case bears a certain similarity to that in the other. Though vomiting in every case is by no means the result of indigestion, for when the stomach is simply overloaded or rather over-filled, it relieves itself of the excess by vomiting, and this act takes place with little effort and no suffering, the process of digestion still going on undisturbed.

When indigestion, colic, constipation, or diarrhoea arises from improper food in babies raised by hand—that is, from food which evidently does not agree with the child's stomach—or even from unwholesome maternal milk, we will frequently have to encounter many difficulties before we can select a suitable article of food that will agree with the delicate digestive apparatus of the babe. We should endeavor to make a good choice of food; and if, having done so, we find that the choice has been a mistake, we should try again, not despairingly, but remembering always that what is one baby's food is another baby's poison.

Treatment.

Ipecac. There is much sickness of the stomach; the more constant the nausea, the more certain will Ipecac relieve, the stools look fermented. *Dose:* Two pills, repeated after a lapse of four hours.

Chamomilla. The child is very irritable and fretful, must be carried all the time; distress after nursing; sleepless, starting and jerking while asleep; stools smell like rotten eggs and are green.

chopped, or consist of white and yellow mucus. *Dose*: As for *Ipecac*.

Arsenicum. The food is thrown up as soon as taken into the stomach, and passes off through the bowels undigested; the stools are offensive; much crying during and after nursing, or as soon as the child begins to take food. Emaciation and restlessness. *Dose*: As for *Ipecac*.

Allopathic Treatment.

Flatus will be relieved by alkalies, given as above, and care regarding food. Vomiting, except as a symptom of serious disease, and not simply a regurgitation from over-distention of the stomach, will be relieved by the same means. The infant should be given a little less food at a time. With infants at the breast, it is generally of no consequence.

FLATULENCE.

Gentle friction with the palm of the hand, which has been previously warmed, will often give grateful relief. It is best to begin at the lower right side of the bowels, passing the hand gently up the right side as high as the stomach, then cross and down the left side, and so on. At the same time the following remedies should be employed:

Nux Vomica should be used at the onset for children of a spare, meagre habit, or who are more subject to a costive condition. *Dose*: One pill every two hours.

Chamomilla should be administered four hours after the third dose of *Nux* or *Pulsatilla*, if no permanent relief should have resulted; and more especially if convulsions or diarrhoea be developed as attendant symptoms. *Dose*: As directed for *Nux*.

The diet must, at the same time, be attended to and altered if of an indigestible nature and the suspected cause of the mischief. This will, in time, bring a relief, as flatulence never occurs where proper food is furnished the child and only a sufficient quantity is given at regular intervals.

MILK-CRUST, OR SCAB.

This eruption occurs in children while nursing, and more commonly while teething, and appears to be very closely connected with that process. It commonly commences on the cheeks and forehead by the breaking out of a number of small yellowish pustules (pimples), crowded together on a red surface. These pustules excite great itching, and are quickly broken, discharging a viscid fluid that dries, forming greenish-yellow scabs; the scabs are frequently rubbed off, but form again; fresh crops of pustules appear around the scabs, which, quickly extend to the scalp, and even the face.

The eruption appears behind the ears, and patches will sometimes appear, also, upon the neck and breast. The discharge from the pustules is caught by the hair upon the head, and forms into small, irregular, friable masses, which may resemble the bruised yolk of a hard-boiled egg. The pustules or *achores*, as the small superficial ulcers which they form upon the skin are sometimes called, have an irregular form, contain a straw-colored fluid, rest upon an inflamed base, and are succeeded by a thin brown or yellowish scab. There is much irritation, heat and itching; the discharge is very profuse, and with so much itching that it is easily rubbed off, leaving the surface raw and excoriated. This ailment may be regarded as nature's effort to throw off from the system what has no right to be there, and the presence of which would be injurious.

Must Not be Driven In.

Whenever this discharge is brought in contact with the skin—in the face, where it trickles down on the breast, where it falls, and upon the backs of the hands, violently used by the child to rub with—it proves so acrid as to produce there a fresh eruption. The same is true even of the arms of the nurse upon which the child rests its head at night. The itching and burning acidity of the eruption, and discharge, are much worse at night. All external application should be avoided, with the exception of a little sweet cream or olive oil, which has sometimes proved very grateful. Everything should be carefully

avoided which would have a tendency to drive this eruption in, since it might result in some more serious trouble.

Treatment.

Aconite should always commence our treatment, when we find excessive restlessness and excitability produced by this affection, and when the skin around the parts is red, inflamed and itching. *Dose*: Two pills repeated every two hours.

Viola Tricolor. As soon as the beneficial effect has resulted from the administration of Aconite; and six hours after the last dose of that medicine, it will be well to proceed with the remedy under consideration, which, in the simple and uncomplicated form of the disease, is often sufficient to effect a cure. *Dose*: Two globules every night and morning.

APHTHÆ—THRUSH.

The thrush often attacks the infant in the second week, and is characterized by the mouth and tongue being covered with minute whitish blisters, which are rubbed off by the action of sucking. A succession of these vesicles is constantly taking place as long as the disease lasts, and if not checked, become confluent and sometimes present an ulcerated appearance, or form a thin, white crust, which generally lines the whole cavity of the mouth, and in severe cases, extends to the throat, and even throughout the stomach and bowels.

The affection, although of itself neither malignant nor dangerous, frequently causes not only considerable suffering to the child by preventing it from suckling, but great pain and inconvenience to the mother by being communicated to the nipples and causing excoriations, etc.

Treatment.

Chamomilla. When the child exhibits much uneasiness, and must be carried all the time, this remedy will prove more beneficial. *Dose*: Two pills every three hours.

Mercurius is to be recommended when there is more than usual moisture in the mouth. There is inflammation in the whole cavity of

the mouth ; the gums have ulcers on them. *Dose* : Two pills, to be taken every four hours.

Sulphur. The child does not take its usually long sleep ; it awakens often and the same symptoms prevail, even after taking the other remedies. *Dose* : As for *Mercurius*.

The mouth should be carefully washed after nursing, with a soft old linen rag, dipped in tepid water, or in water containing a small quantity of Borax and Honey in solution. Pure molasses, applied by means of a piece of old linen or muslin, or by the finger, constitutes one of the best healing washes, where one seems to be needed.

Allopathic Treatment.

A good digestion and regularity of the bowels should be secured.

The nourishment of the child is generally insufficient, so that in cases of weakly infants, additional feeding is necessary. A little new creamy milk, the juice of lean meat, or freely ground lean beef may be given. For local use, a wash of Lime Water, a solution of Chlorate of Potash or Borax is appropriate.

If ulceration occurs, the popular Golden Thread tea and Borax may be used. Sulphurous Acid, two drachms in an ounce of water, may be applied with a linen mop.

CONSTIPATION.

Even very young infants are sometimes affected with constipation ; in fact, during the first two months of infantile life, constipation is frequent, while diarrhœa is comparatively rare. This may be occasioned by some hereditary predisposition, and be maintained by the constantly imparted influence of a costive habit on the part of the nursing mother.

In the medical treatment of the constipation of infants, recourse must always be had to the cause. If this be found in the nursing mother, the proper remedies should first be administered to her. Should there be anything in her diet which may be capable of rendering either her or her child constipated, this should also be attended to,

With scarcely a single exception, cases of costiveness in nursing infants will be found dependent upon the influence of diet, hereditary and constitutional weakness and inaction of the bowels, or actual derangement of the liver.

Mechanical Measures.

We may observe that an injection (lavement) of tepid water, or of some milk and water, may occasionally be used, if necessary, to remove the obstruction of fœces ; or, a suppository, consisting of a small strip of paper or linen, spirally twisted and lubricated with oil, may be introduced by a gentle rotary movement.

If these means should fail at first, they should be repeated after the lapse of a few hours. Rubbing the stomach and bowels frequently in the course of the day with a warm hand sometimes assists the means employed. In order to overcome the constitutional tendency, it will be well to use the appropriate remedies.

Allopathic Treatment.

Constipation is best relieved by injections of soap and water or cold water. We have known teaspoonful doses of Olive Oil to relieve constipation in infants without being followed again by constipation. Syrup of Rhubarb, in doses of half a teaspoonful to a teaspoonful and a half, may be used. Fluid Extract of Senna in doses of ten to thirty drops in syrup is generally an effectual remedy in constipation. Change in the diet which will overcome costiveness is called for. To this end fruit is indicated. It may be raw or cooked.

If hard fœces have lodged in the rectum (lower bowel), which the injections do not remove, they should be broken down by the finger or removed with the handle of a spoon. In other children free exercise should be taken ; in cities the systematic use of gymnastics may be useful. Cold wet-packing of the abdomen often succeeds. Exercise and bathing, and a diet with plenty of fruit, will probably relieve.

The Fluid Extract of Senna may be given, and for continued use, Tincture of Nux Vomica and Belladonna will establish the habit of a

regular stool. Take of tincture of Nux Vomica and Tincture of Belladonna each two drachms, Syrup of Orange Peel four drachms. Mix. *Dose*: One to twenty drops once a day, according to the age of the child.

DIARRHŒA OF CHILDREN.

Infantile diarrhœa constitutes one of the most frequent and serious of all diseases that occur in infancy and childhood.

Of itself alone diarrhœa does not often prove directly fatal, but its long continuance seriously weakens the patient, and endangers the health, and it constitutes, moreover, a very grave complication of other forms of disease.

Causes of diarrhœa are various; the introduction into the stomach of inappropriate indigestible food; the deranged condition of the mother's milk induced by mental emotions, improper diet, or other causes on the part of the mother; fright and exposure of the infant to cold, and the improper use of laxatives, etc., may be enumerated as being the most frequent exciting causes of this disorder.

It is well to notice closely as to the symptoms. A healthy infant at the breast, passes on an average from three to six motions in twenty-four hours; but in some instances the evacuations are more frequent, yet without in any degree affecting the health of the child; in such cases, then, there ought to be little or no interference, so long as the stools remain free from fetor, possessing merely the slightly acid smell, peculiar to unnatural indication. When, however, the stools become green and watery, or yellow and watery, brown and frothy, as if fermented, mixed with phlegm or mucus, or consisting entirely of mucus, emit an offensive odor, and are generally preceded or accompanied by signs of suffering, it becomes necessary to have recourse to remedial aid.

CHOLERA INFANTUM—SUMMER COMPLAINT.

This is a special form of bowel complaint, which requires special notice. This disease very often proves fatal, even under the best of treatment, since it appears usually in the latter part of the summer, when the young infant's system is already somewhat exhausted by the

previous heat; when the air is impure and the weather sultry, or warm and damp, and seems to spring up as an epidemic from some atmospheric miasm which is little less than malignant. In this, the worst form of infantile diarrhœa, all the symptoms seem equal in intensity and the disease runs a very rapid course. Children under two years are most liable to attack.

Vomiting and diarrhœa form the most notable symptoms. The stomach is so irritable that it rejects immediately and sometimes with great violence everything that it receives. At first, the matter vomited consists of the ordinary contents of the stomach, but this does not continue long; as the malady advances the matter vomited is tinged with bile and presents a greenish hue.

Serious Symptoms.

The discharge from the bowels usually consists of a colorless or sometimes greenish, inodorous and watery fluid; occasionally with shreds of mucus mixed with it. The stools are usually discharged without effect—sometimes unconsciously—or are squirted out as though thrown from a syringe. Frequently there is considerable pain, with straining, the infant manifesting its sufferings by a whining, plaintive cry, by restlessness, and by drawing up and extending its limbs. As the disease advances, vomiting becomes spontaneous, and the matter ejected resembles that passing from the bowels, while the number of stools increase.

Sometimes there is a sudden lull in the whole force of the disease, or the diarrhœa may abate and the vomiting continue, or the opposite. There is extreme languor and prostration, and generally very rapid emaciation, which conditions, together with the vomiting and the diarrhœa, as above described, clearly and unmistakably point to cholera infantum.

As the disease progresses, the discharges from the bowels become still more frequent, are passed involuntarily, and are usually more profuse, resembling dark-colored dirty water or "washings of meat," and are very offensive; emaciation becomes extreme; the eyes are

languid and dull, or hollow and glassy, and the child takes no notice of surrounding objects or persons ; the lips are dry and shrivelled. In many cases, the child lies in an imperfect doze, with half-closed eyes, and entirely insensible to external impressions. The abdomen frequently becomes distended and hard, or is sunken or flaccid.

Stupor and Convulsions.

Frequently, in fatal cases, the child falls into a complete state of stupor, and convulsions ensue. It not unfrequently happens, particularly in children predisposed to affection of the brain, that in an early stage of the disease the brain becomes involved, and the child dies with all the symptoms of inflammation of the brain.

Favorable symptoms are an abatement of the fever, and the gradual restoration of an even temperature, with decreased frequency of the pulse ; cessation of vomiting and decrease in the number of evacuations, with a gradual return of the stool to a more natural condition and appearance ; natural and peaceful sleep, desire for food, and a general improvement in the appearance of the child, together with a return of playfulness.

Homœopathic Treatment.

The subjoined medicines, however, are those most frequently called for in the treatment of the disease under consideration, and are approved as of the utmost efficacy when carefully selected for the individual case.

Aconitum is very frequently indicated, and should be given, in cases in which there is febrile excitation, manifested by acceleration of the pulse, heat and dryness of the skin, and thirst. Under such circumstances it often happens that Aconitum, when promptly administered, not only removes the febrile indication, but, as well, cuts short the entire disease, and very promptly aids in restoring the babe to health.

Dose: Two globules, dry, on the tongue, every one or two hours, according to the severity of the symptoms, until manifest improve-

ment or change. If a favorable change should result, however slight, at once lengthen the intervals between the doses to two, three, or four hours, as the case may be, according to the existing condition, and finally cease giving medicine upon the exhibition of marked and decided amelioration and improvement. Should, however, no evidence of improvement be manifested after the sixth dose, or should symptoms indicative of some other remedy sooner occur, proceed at once to the administration of another and better indicated remedy.

Arsenicum is suited particularly to cases in which there is great weakness from the first, so that the child does not care to hold its head up; there is much thirst, while drinking induces vomiting and stool; vomiting and purging occur at the same time, and greatly exhaust the child; the child has a pinched and distressed look, and is very restless, which restlessness, together with the other symptoms, grows worse after midnight; coldness of the hands, feet, etc. *Dose:* In every particular as directed for *Aconitum*.

Ipecacuanha should be given when the stools, which are very frequent, have a fermented appearance, or resemble greenish water; and when, more particularly, nausea and vomiting predominate, the child seeming to be sick at its stomach, almost constantly. *Dose:* In every particular as directed for *Aconitum*.

Chamomilla will frequently prove useful in the early stages of some cases, particularly if the child be suffering from the irritation incident to dentition; it is more particularly indicated by the presence of griping, colicky pains, with greenish stools; fretfulness and crossness, with desire to be carried. *Dose:* Two globules, dry, on the tongue, every three hours, until manifest improvement or change.

Diet and Regimen.

Very little nourishment will be taken by an infant suffering from cholera infantum. Breast milk should constitute its chief source of food and drink, in cases in which the child suckles; but in other cases, however, great care must be taken to avoid giving anything that can add to the irritation already existing in the stomach and

bowels. Pure, dilute milk, boiled and sweetened, or thin, well-boiled oatmeal gruel, will afford sufficient food and drink. Water may be given in small quantities, if it does not excite vomiting; in which latter case, the infant may be permitted to suck small pieces of ice from time to time, if its lips be parched and dry, or a small piece of ice may be enclosed in a linen rag, and the child allowed to suck at it.

Every effort should be made to sustain the natural warmth of the body, particularly of the abdomen and lower extremities, by the application of warmed woollen cloths; but the resort to the application of cloths wrung out of hot spirits, or claret wine, or other poultices, is highly objectionable, and should not be resorted to.

Allopathic Treatment.

In the cholera of infants, if vomiting and purging have not emptied the stomach and bowels of their irritating contents, as shown by undigested substances in the stools or vomited matter, an emetic of three or five grains of Ipecac should be given in water, or a purge of three grains of Calomel should be given. The latter should be assisted in its operation by an injection of warm water. If no indigestible matter is noticed, neither a purge nor an emetic should be given, but no time should be lost in stopping the discharges.

This is best and soonest done with Opium. One drop of Laudanum may be given with a teaspoonful of Chalk Mixture or three grains of Sub-Carbonate (or Nitrate) of Bismuth in a teaspoonful of Lime Water. This may be given every hour to a child a year old. To those younger, Paregoric should be given instead of Laudanum. If neither Bismuth and Lime Water nor Chalk Mixture are at hand, the Opiate should be given with a grain or two of Bicarbonate of (baking) Soda.

The object is to diminish the discharges from the stomach and bowels and improve their character. When the discharges are checked or the child begins to be stupid, the opiate should be discontinued or given less frequently. When the vomiting has ceased, if the bowels continue moving, if the child is not inclined to be stupid,

an injection of two or five drops of Laudanum may be given, with half a teaspoonful of milk in a small, hard-rubber syringe.

Well-tried Remedies.

If the child is nursing it should be confined wholly to the breast, and then only allowed to draw small quantities at a time. If the breast milk is rejected, it can be allowed lean meat finely minced, pounded in a mortar and strained, which may be seasoned with salt. The white of eggs mixed with water, and rendered alkaline with Bicarbonate of (baking) Soda, five to ten grains, is frequently well digested. The raw meat juice and white of egg are of great use when there is great prostration or emaciation.

If the pulse weakens or collapse threatens, stimulants should be freely given. Brandy or bourbon whiskey is best suited. The dose is fifteen or twenty drops to a teaspoonful, given with the milk, meat juice, or egg, and can be repeated at intervals varying from one to four hours. Stimulants are generally indicated early.

Rice or barley water can be drunk; small lumps of ice may be allowed. A warm poultice over the stomach will be beneficial. Great heat of the skin will require cool sponging. If the skin is cool or cold, give a bath of one hundred to one hundred and four degrees.

Sometimes cholera infantum is caused from ill-nourishment. In these cases, the acute symptoms are relieved by Opium, as above directed, and better nourishment completes the cure. When the disease occurs from the effects of heat, Bromide of Potassium is highly serviceable, and is thought by some to be generally applicable. Take of Bromide of Potash two scruples, Mucilage of Gum Arabic two ounces. Mix. *Dose:* From fifteen drops to a teaspoonful.

Five-grain doses of Cerium, an eighth of a drop of Creosote or Carbolic Acid in water, are useful in relieving the vomiting. Continued diarrhoea will call for astringents. Anæmia (thin blood) will require tonics, such as: Take of Citrate of Iron and Quinine ten to fifteen grains. Orange Water and Peppermint Water each an ounce. Mix. *Dose* Give teaspoon half full three or four times a day.

If the cause of the disease is malarial, one or two grains of Quinine ought to be given at the first intermission.

ASTHMA.

This disease attacks children between the ages of two and eight (seldom infants at the breast), and is very similar to croup. The attack almost always sets in in winter, in consequence of a cold ; first at night, suddenly without any distinct premonitory symptoms, and sets in at once with the most violent symptoms of suffocation without any rattling or wheezing.

The pulse is hurried and small. If cough sets in it is short, rough, without gagging or expectoration ; the voice is hoarse, deglutition difficult. However, the child does not complain of a local obstacle in swallowing or breathing, or of pain in the larynx or trachea, but of a dull pain or spasmodic drawing throughout the chest, as if caused by suffocating vapors.

VACCINATION.

The customary place for vaccination to be performed, is on the outer side of the upper part of the left arm. Three to six points should be inserted. In two or three days the swelling is noticed, and the fifth or sixth day the vesicles are formed, which reach their greatest size from the seventh to the ninth day. This is the time to vaccinate from arm to arm. The crusts mature and are ready to drop off on about the twentieth day.

The itching, burning, and pain occasioned by the vesicles, may be greatly relieved by brushing over them a mixture of one drachm of Fluid Extract of Belladonna, with four drachms of Olive Oil, or if the inflammation is very intense, a cloth wet continually with a solution of fifteen grains of Sugar of Lead, and five to ten grains of the Acetate of Morphine in a pint of rain-water, can be constantly applied if the patient remains in bed. The feverishness and discomfort does not require any treatment.

CHAPTER XXIV.

HOW TO PREVENT DISEASE.

Unhealthy Boys and Girls—The Overworked Brain—Tendency to Scrofula—Preventive Measures—Building Up the System—Girls Who Stoop—Curvature of the Spine—Treatment for Spinal Affections—Games of Sport for Young Ladies—Consumption—Blood-spitting—Causes and Remedies—Poor Diet—Treatment for Sore Throat—Evil Effects of Tobacco—Bleeding from the Nose—Fainting—Costiveness—Too Much Medicine—Appeal to American Mothers—Pimples on the Face—Gum-boils—How to Cure Corns—How to Destroy Warts—Delicate Young Ladies—Bodily Improvement among American Girls.

“SMART” children are not always the healthiest. A greater quantity of arterial blood is sent to the brain of those who are prematurely talented, and hence it becomes more than ordinarily developed. Such advantages are not unmixed with danger; this same arterial blood may excite and feed inflammation, and either convulsions, or water on the brain, or insanity, or, at last, idiocy may follow. How proud a mother is in having a precocious child. How little is she aware that precocity is frequently an indication of disease.

It behooves a parent, if her son be precocious, to restrain him—to send him to a quiet country place, free from the excitement of the town; and when he is sent to school, to give directions to the master that he is not on any account to tax his intellect (for a master is apt, if he have a clever boy, to urge him forward); and to keep him from those institutions where a spirit of rivalry is maintained, and where the brain is thus kept in a state of constant excitement. Medals and prizes are well enough for those who have moderate abilities, but dangerous indeed to those who have brilliant ones.

An over-worked precocious brain is apt to cause the death of the owner; and if it does not do so, it in too many instances injures the brain irreparably, and the possessor of such an organ, from being one of the most intellectual of children, becomes one of the most commonplace of men. Let us urge you, if you have a precocious child, to

give, and that before it be too late, the subject in question your best consideration.

Precocious boys in their general health are usually delicate. Nature seems to have given a delicate body to compensate for the advantages of a talented mind. A precocious youth is predisposed to consumption, more so than to any other disease. The hard study which he frequently undergoes excites the disease into action. It is not desirable, therefore, to have a precocious child. A writer in "Fraser's Magazine" speaks very much to the purpose when he says, "Give us intellectual beef rather than intellectual veal."

Predisposition to Scrofula.

He or she who has a moist, cold, fair, delicate, and almost transparent skin, large prominent blue eyes, protuberant forehead, light-brown or auburn hair, rosy cheeks, pouting lips, milk-white teeth, long neck, high shoulders, small, flat and contracted chest, tumid bowels, large joints, thin limbs, and flabby muscles, is the person most predisposed to scrofula.

The disease is not entirely confined to the above; sometimes she or he who has black hair, dark eyes and complexion is subject to it, but yet, far less frequently. It is a remarkable fact that the most talented are the most prone to scrofula, and being thus clever, their intellect is too often cultivated at the expense of their health. In infancy and childhood, either water on the brain or mesenteric disease; in youth, pulmonary consumption is frequently their doom. They are like shining meteors—their life is short, but brilliant.

Warding off Scrofula.

Strict attention to the rules of health is the means to prevent scrofula. Books, unless as an amusement, ought to be discarded. The patient must almost live in the open air, and his residence should be a healthy country place, where the air is dry and bracing; if it be at a farm-house, in a salubrious neighborhood, so much the better. In selecting a house for a patient predisposed to scrofula,

good, pure water should be an important requisite; indeed for every one who values his health. Early rising in such a case is most beneficial. Wines, spirits, and all fermented liquors ought to be avoided. Beef-steaks and mutton-chops in abundance, and plenty of milk and of farinaceous food, such as rice, sago, arrowroot, etc., should be his diet.

Scrofula, if the above rules be strictly and perseveringly followed, may be warded off; but there must be no half measures, no trying to serve two masters—to cultivate at the same time the health and the intellect. The brain, until the body becomes strong, must not be taxed. You may prevent scrofula by care, but that some children are originally predisposed to the disease there cannot be the least doubt, and in such cases the education and the habits of the youth should be so directed as to ward off a complaint, the effects of which are so frequently fatal.

But suppose the disease to be already formed, what must then be done? The plan recommended above must still be pursued, not by fits and starts, but steadily and continuously, for it is a complaint that requires a vast deal of patience and great perseverance. Warm and cold sea-bathing in such a case is generally most beneficial. In a patient with confirmed scrofula it will, of course, be necessary to consult a skilful and experienced doctor.

Avoid Weakening the System.

But do not allow, without a second opinion, any plan to be adopted that will weaken the system, which is already too much depressed. No; rather build up the body by good nourishing diet (as previously recommended), by cod-liver oil and by a dry bracing atmosphere. Let no active purging, no mercurials, no violent, desperate remedies, be allowed. If the patient cannot be cured without them, we are positive that he will not be cured with them.

But do not despair; many scrofulous patients are cured by time and by judicious treatment. But if desperate remedies are to be used, the poor patient had better by far be left to nature: "Let me

fall now into the hand of the Lord ; for very great are his mercies : but let me not fall into the hand of man."—*Bible*.

Evils of Stooping.

A girl ought never to be allowed to stoop ; stooping spoils the figure, weakens the chest, and interferes with the digestion. If she cannot help stooping, you may depend upon it that she is in bad health, and that a medical man ought to be consulted. As soon as her health is improved, calisthenic and gymnastic exercises should be resorted to. Horse exercise and swimming in such a case are very beneficial. The girl should live well, on good nourishing diet, and not be too closely confined either to the house or to her lessons. She ought, during the night, to lie on a horse-hair mattress, and during the day, for two or three hours, flat on her back on a reclining board. Stooping, if neglected, is very likely to lead to consumption.

If a boy be round-shouldered and slouching in his gait, let him be drilled ; there is nothing more likely to benefit him than drilling. You never see a soldier round-shouldered nor slouchy in his gait. He walks every inch like a man. Look at the difference in appearance between a country bumpkin and a soldier. It is the drilling that makes the difference : "Oh, for a drill-sergeant to teach them to stand upright, and to turn out their toes, and to get rid of that slouching hulking gait, which gives them such a look of clumsiness and stupidity!"

Curvature of the Spine.

The causes of lateral curvature of the spine, and consequent bulging out of the ribs, arise either from delicacy of constitution, from the want of proper exercise, from too much learning, or from too little play, or from not sufficient or proper nourishment for a rapidly-growing body. We are happy to say that such a case, by judicious treatment, can generally be cured—namely, by gymnastic exercises, such as the hand-swing, the fly-pole, the patent parlor gymnasium, the chest-expander, the skipping rope ; the swimming-bath ; all sorts of outdoor games, such as tennis, archery, bicycling in moderation ; by plenty of

good nourishment, by making her a child of nature, by letting her almost live in the open air, and by throwing books to the winds.

But let us strongly urge you not, unless ordered by an experienced surgeon, to allow any mechanical restraints or appliances to be used. If she be made strong, the muscles themselves will pull both the spine and the ribs into their proper places, more especially if judicious games and exercises (as before advised), and other treatment of a strengthening and bracing nature, which a medical man will indicate to you, be enjoined.

Mechanical appliances will, if not judiciously applied, and in a proper case, waste away the muscles, and will thus increase the mischief; if they cause the ribs to be pushed in in one place, they will bulge them out in another, until, instead of being one, there will be a series of deformities. No, the giving of strength and the judicious exercising of the muscles are, for a lateral curvature of the spine and the consequent bulging out of one side of the ribs, the proper remedies, and, in the majority of cases, are most effectual, and quite sufficient for the purpose.

Let There be no Delay.

We think it well to strongly impress upon a mother's mind the great importance of early treatment. If the above advice be followed, every curvature in the beginning might be cured. Cases of several years' standing might, with judicious treatment, be wonderfully relieved.

Bear in mind, then, that if the girl is to be made straight, she is first of all to be made strong; the latter, together with the proper exercises of the muscles, will lead to the former; and the earlier a medical man takes it in hand, the more rapid, the more certain, and the more effectual will be the cure.

An inveterate, long-continued, and neglected case of curvature of the spine and bulging out of the ribs on one side might require mechanical appliances, but such a case can only be decided on by an experienced surgeon, who ought always, in the first place, to be consulted.

Spitting of blood is always to be looked upon with suspicion; even

when a youth appears, in other respects, to be in good health, it is frequently the forerunner of consumption. It might be said that, by mentioning the fact, we are unnecessarily alarming a parent, but, according to Shakespeare, it would be a false kindness if we did not do so:

“I must be cruel, only to be kind.”

Let us ask, when is consumption to be cured? Is it at the onset, or is it when it is confirmed? If a mother had been more generally aware that spitting of blood was frequently the forerunner of consumption, she would, in the management of her offspring have taken greater precautions; she would have made everything give way to the preservation of their health; and, in many instances, she would have been amply repaid by having the lives of her children spared to her.

It might be well to state that consumption creeps on insidiously. One of the earliest symptoms of this dreadful scourge is a slight, dry, short cough, attended with tickling and irritation at the top of the throat. This cough generally occurs in the morning; but, after some time, comes on at night, and gradually through the day and the night. Frequently, during the early stage of the disease, a slight spitting of blood occurs.

Growing Bodily Weakness.

There is usually hoarseness, not constant, but coming on if the patient be tired, or towards the evening; there is also a sense of lassitude and depression, shortness of breath, a feeling of being quickly wearied—more especially on the slightest exertion. The hair of a consumptive person usually falls off, and what little remains is weak and poor; the joints of the fingers become enlarged, or clubbed as it is sometimes called; the patient loses flesh, and, after some time, night-sweats make their appearance: then we may know that hectic fever has commenced.

Hectic begins with chilliness, which is soon followed by flushings of the face and by burning heat of the hands and feet, especially of the palms and soles. This is soon succeeded by perspirations. The patient has generally, during the day, two decided paroxysms of

hectic fever—the one at noon, which lasts above five hours; the other in the evening, which is more severe, and ends in violent perspirations, which perspirations continue the whole night through. He may, during the day, have several attacks of hectic flushes of the face, especially after eating; at one moment he complains of being too hot, and rushes to the cool air; the next moment he is too cold, and almost scorches himself by sitting too near the fire. Whenever the circumscribed hectic flush is on the cheek, it looks as though the cheek had been painted with vermilion, then is the time when the palms of the hands are burning hot. Crabbe, in the following lines, graphically describes the hectic flush:

“When his thin cheek assumed a deadly hue,
And all the rose to one small spot withdrew;
They called it hectic; 'twas a fiery flush,
More fixed and deeper than the maiden blush.”

The expectoration at first is merely mucus, but after a time it assumes a characteristic appearance; it has a roundish, flocculent, woolly form, each portion of phlegm keeping, as it were, distinct; and if the expectoration be stirred in water, it has a milk-like appearance. The patient is commonly harassed by frequent bowel complaints, which rob him of what little strength he has left. The feet and ankles swell.

Last Stages.

The perspiration, as before remarked, comes on in the evening, continues all night—more especially towards morning, and while the patient is asleep; during the time he is awake, even at night, he seldom sweats much. The thrush generally shows itself towards the close of the disease, attacking the tongue, the tonsils and the soft palate, and is a sure harbinger of approaching death. Emaciation rapidly sets in.

If we consider the immense engines of destruction at work, namely, the colliquative (melting) sweats, the violent bowel complaints, the vital parts that are affected, the harassing cough, the profuse expectoration, the hectic fever, the distressing exertion of struggling to breathe—we

cannot be surprised that "consumption had hung out her red flag of no surrender," and that death soon closes the scene. In girls, provided they have been previously regular, menstruation gradually declines, and then entirely disappears.

The predisposing causes of consumption are the tuberculous habit of body, hereditary predisposition, narrow or contracted chest, deformed spine, delicacy of constitution, bad and scanty diet, or food containing but little nourishment, impure air, close in-door confinement in schools, in shops and in factories, ill-ventilated apartments, dissipation, late hours, over-taxing with book-learning the growing brain, thus producing debility, want of proper out-door exercises and amusements, tight lacing; indeed, anything and everything that either will debilitate the constitution, or will interfere with, or will impede, the proper action of the lungs, will be the predisposing causes of this fearful and lamentable disease.

Poor and Insufficient Diet.

An ill, poor, and insufficient diet is the mother of many diseases, and especially of consumption: "Whatsoever was the father of a disease, an ill diet was the mother." The most common exciting causes of consumption are slighted colds, neglected inflammation of the chest, long continuance of influenza, sleeping in damp beds, allowing wet clothes to dry on the body, unhealthy employments—such as needle-grinding, pearl button making, etc.

Supposing a youth to have spitting of blood, what precautions should we take to prevent it from ending in consumption? Let his health be the first consideration; throw books to the winds; if he be at school take him away; if he be in trade cancel his indentures; if he be in the town send him to a sheltered healthy spot in the country, or a mild climate; let this be done if possible.

You should be particular in his clothing, taking especial care to keep his chest and feet warm. If he did not already wear flannel waistcoats, let it be winter or summer, we should recommend him immediately to do so: if it be winter, we should advise him, also, to

take to flannel drawers. The feet must be carefully attended to ; they ought to be kept both warm and dry, the slightest dampness of either shoes or stockings should cause them to be immediately changed. If a boy, he ought to wear double-breasted waistcoats ; if a girl, high dresses.

Errors in Treatment.

The diet must be nutritious and generous ; he should be encouraged to eat plentifully of beef and mutton. There is nothing better for breakfast, where it agrees, than milk ; indeed, it may be frequently made to agree by previously boiling it. Wine and spirits must, on no account, be allowed. We caution parents in this particular, as many have an idea that wine, in such cases, is strengthening, and that rum and milk is a good thing either to cure or to prevent a cough.

If it be summer, let him be much in the open air, avoiding the evening and the night air. If it be winter he should, unless the weather be mild for the season, keep within doors. Particular attention ought to be paid to the point the wind is in, as he should not be allowed to go out if it is either in the north, in the east, or in the northeast ; the latter is more especially dangerous. We know of no remedy so likely to ward off that formidable complaint, consumption, as change of air.

How to Deal with a Sore Throat.

If a youth be much predisposed to a sore throat he must use every morning thorough ablution of the body, beginning cautiously ; that is to say, commencing with the neck one morning, then, by degrees, morning after morning, sponging a larger surface, until the whole of the body be sponged. The chill at first must be taken off the water ; gradually the temperature ought to be lowered, until the water be quite cold, taking care to rub the body thoroughly dry with a coarse towel—a Turkish rubber being the best for the purpose.

He ought to bathe his throat externally every night and morning with lukewarm salt and water, the temperature of which must be gradually reduced until at length no warm water be added. He

should gargle his throat either with barm, vinegar, and sage tea, or with salt and water—two teaspoonfuls of table salt dissolved in a tumbler of water. He ought to harden himself by taking plenty of exercise in the open air. He must, as much as possible, avoid either sitting or standing in a draught; if he be in one, he should face it. He ought to keep his feet warm and dry. He should take as little aperient medicine as possible, avoiding especially both calomel and blue-pill. As he grows up to manhood he ought to allow his beard to grow, as such would be a natural covering for his throat.

Bad Effects of Tobacco.

We are not now called upon to give an opinion of the effects of tobacco smoking on the middle-aged and on the aged. We are addressing a mother as to the desirability of her sons, when boys, being allowed to smoke. We consider tobacco smoking one of the most injurious and deadly habits a boy or young man can indulge in. It contracts the chest and weakens the lungs, thus predisposing to consumption. It impairs the stomach, thus producing indigestion. It debilitates the brain and nervous system, thus inducing epileptic fits and nervous depression. It stunts the growth, and is one cause of the present race of pigmies. It makes the young lazy and disinclined for work. It is one of the greatest curses of the present day.

The following cases prove, more than any argument can prove, the dangerous and deplorable effects of a boy smoking. We copy the first case from *Public Opinion*: "A pupil in one of the academies, only twelve years of age, was some time since seized with epileptic fits, which became worse and worse in spite of all the remedies employed. At last it was discovered that the lad had been for two years past secretly indulging in the weed. Effectual means were adopted to prevent his obtaining tobacco, and he soon recovered."

The other case was a youth of nineteen. He was an inveterate smoker. From being a bright intelligent lad, he was becoming idiotic, and epileptic fits were supervening. He had painted to him, in vivid colors, the horrors of his case, and was assured that if he still persisted



THE LARGE INTESTINES AND MUSCLES OF THE THIGHS.



in his bad practices, he would soon become a drivelling idiot. We at length, after some trouble and contention, prevailed upon him to desist from smoking altogether. He rapidly lost all epileptic symptoms, his face soon assumed its wonted intelligence, and his mind asserted its former power.

Treatment for Bleeding from the Nose.

Do not, unless it be violent, interfere with a bleeding from the nose. A bleeding from the nose is frequently an effort of nature to relieve itself, and therefore, unless it be likely to weaken the patient, ought not to be restrained. If it be necessary to restrain the bleeding, press firmly, for a few minutes, the nose between the finger and the thumb; this alone will often stop the bleeding; if it should not, then try what bathing the nose and the forehead and the nape of the neck with water, quite cold, will do. If these plans fail, try the effect of either powdered alum or of powdered matico, used after the fashion of snuff—a pinch or two either of the one or of the other, or of both, should be sniffed up the bleeding nostril. If these should not answer the purpose, although they almost invariably will, apply a large lump of ice to the nape of the neck, and put a small piece of ice into the patient's mouth to suck.

If these methods do not succeed, plunge the hands and fore-arms into cold water, keep them in for a few minutes, then take them out, and either hold, or let be held up, the arms and the hands high above the head; this plan has frequently succeeded when others have failed. Let the room be kept cool, throw open the windows, and do not have many in the room to crowd around the patient.

A local anæsthetic—the ether spray—playing for a few seconds to a minute on the nose and up the bleeding nostril, would act most beneficially in a severe case of this kind, and would, before resorting to the disagreeable operation of plugging the nose, deserve a trial.

In case of a young lady fainting, lay her flat upon her back, taking care that the head be as low as, if not lower than, the body; throw open the windows, do not crowd around her, unloosen her dress as

quickly as possible ; ascertain if she have been guilty of tight lacing ; for fainting is sometimes produced by that reprehensible practice. Shakespeare knew the great importance of not crowding around a patient who has fainted. He says :

“So play the foolish throngs with one that swoons ;
Come all to help him, and so stop the air
By which he should revive.”

Apply smelling-salts to her nostrils ; if they be not at hand, burn a piece of rag under her nose ; dash cold water upon her face ; throw open the window ; fan her, and do not, as is generally done, crowd round her, and thus prevent a free circulation of air. As soon as she can swallow, give her either a draught of cold water or a glass of wine or a teaspoonful of sal-volatile in a wine-glassful of water.

To prevent fainting for the future, we would recommend early hours ; country air and exercise ; the stays, *if* worn at all, to be worn slack ; attention to diet ; avoidance of wine, beer, spirits, excitement and fashionable amusements.

Sometimes the cause of a young lady fainting is either a disordered stomach or a constipated state of the bowels. If the fainting have been caused by disordered stomach, it may be necessary to stop the supplies, and give the stomach for a day or two, but little to do ; a fast will frequently prevent the necessity of giving medicine. Of course, if the stomach be much disordered, it will be desirable to consult a medical man.

A young lady's fainting occasionally arises from debility—from downright weakness of the constitution ; then the best remedies will be, change of air, good nourishing diet, and the following strengthening mixture : Take of Tincture of Perchloride of Iron, two drachms ; Tincture of Calumba, six drachms ; Distilled Water, seven ounces. Two tablespoonfuls of this mixture to be taken three times a day. Or, for a change, the following : Take of Wine of Iron, one ounce and a-half ; Distilled Water, six ounces and a-half ; to make a Mixture. Two tablespoonfuls to be taken three times a day.

Iron medicines ought always to be taken after instead of before

meal. The best times of the day for taking either of the above mixtures will be eleven o'clock, four o'clock and seven o'clock.

Standard Remedies for Costiveness.

The best opening medicines are—cold ablutions every morning of the whole body, attention to diet, variety of food, bran-bread, grapes, stewed prunes, French plums, figs, fruit both cooked and raw—if it be ripe and sound, oatmeal porridge, lentil powder, vegetables of all kinds, especially spinach, exercise in the open air and early rising. If more attention were paid to these points, poor schoolboys and schoolgirls would not be compelled to swallow such nauseous and disgusting messes as they usually do to their aversion and injury.

Should these plans not succeed (although in the majority of cases, with patience and perseverance, they will) we would advise an enema once or twice a week, either simply of warm water, or of one made of gruel, table-salt and olive-oil, in the proportion of two tablespoonfuls of table-salt, two of oil and a pint of warm gruel, which a boy may administer to himself, or a girl to herself, by means of a proper enema apparatus (syringe).

Use of Water.

Hydrotherapy is oftentimes very serviceable in preventing and in curing costiveness; and, as it will sometimes prevent the necessity of administering medicine, it is both a boon and a blessing. Hydrotherapy supplies us with various remedies for constipation. From the simple glass of cold water, taken early in the morning, to the various douches and sea-baths, a long list of useful appliances might be made out, among which we may mention the "wet compresses" worn for three hours over the abdomen (bowels), with a gutta percha covering.

We have here a word or two to say to a mother who is always physicking her family. It is an unnatural thing to be constantly dosing either a child or anyone else with medicine. One would suppose that some people were only sent into the world to be physicked. If more care were paid to the rules of health, very little

medicine would be required. This is a bold assertion, but we are confident that it is a true one. It is a strange admission for a medical man to make, but, nevertheless, our convictions compel us to avow it.

The principal reason why girls suffer more from costiveness than boys, is that their habits are more sedentary; as the best opening medicines in the world are an abundance of exercise, of muscular exertion, and of fresh air. Unfortunately, poor girls in this enlightened age must be engaged, sitting all the while, several hours every day at fancy-work, the piano, and other accomplishments; they, consequently, have little time for exercise of any kind.

Medicines Lose their Effect.

The bowels, as a matter of course, become constipated; they are, therefore, dosed with pills, with black draughts, with old-fashioned brimstone and molasses—Oh! the abomination!—and with medicines of that class, almost *ad infinitum*. What is the consequence? Opening medicines, by constant repetition, lose their effects, and, therefore, require to be made stronger and still stronger, until, at length, the strongest will scarcely act at all, and the poor unfortunate girl, when she becomes a woman, if she ever does become one, is spiritless, heavy, dull, and listless, requiring daily doses of physic, until she almost lives on medicine.

All this misery and wretchedness proceeds from nature's laws having been set at defiance, from artificial means taking the place of natural ones—from a mother adopting as her rule and guide fashion and folly, rather than reason and common sense. When will a mother awake from her folly and stupidity? This is strong language to address to a lady; but it is not stronger than the subject demands.

Appeal to American Mothers.

Mothers of America! do let us entreat you, ponder well upon what we have said. Do rescue your girls from the bondage of fashion and of folly, which is worse than the bondage of the Egyptian taskmaster; for the Israelites did, in making bricks without straw, work in the

open air—"So the people were scattered abroad throughout all the land of Egypt to gather stubble instead of straw;" but your girls, many of them, at least, have no work, either in the house or in the open air—they have no exercise whatever. They are poor, drawling, dawdling, miserable nonentities, with muscles, for the want of proper exercise, like ribands; and with faces, for the lack of fresh air, as white as a sheet of paper. What a host of charming girls are yearly sacrificed at the shrine of fashion and folly.

Another, and a frequent cause of costiveness, is the bad habit of disobeying the call of having the bowels opened. The moment there is the slightest inclination to relieve the bowels, instantly it ought to be attended to, or serious results will follow. Let us urge a mother to instil into her daughter's mind the importance of this advice.

Face Pimples and Blotches.

Hard red pimples (*acne*—"the grub pimple") are a common and an obstinate affection of the skin, affecting the forehead, the temples, the nose, the chin, and the cheeks; occasionally attacking the neck, the shoulders, the back, and the chest; and as they more frequently affect the young, from the ages of fifteen to thirty-five, and are disfiguring, they cause much annoyance.

These pimples are so well known by most persons as scarcely to need description; they are conical, red, and hard; after a while they become white and yellow at the point, then discharge a thick, yellow-colored matter, mingled with a whitish substance, and become covered by a hard brown scab, and lastly, disappear very slowly, sometimes very imperfectly, and often leaving an ugly scar behind them. To these symptoms are not unfrequently added considerable pain, and always much unsightliness. When these little cones have the black head of a "grub" at their point, they constitute the variety termed *spotted acne*. These latter often remain stationary for months, without increasing or becoming red; but when they inflame they are in nowise different in their course from the common kind.

We find, in these cases, great benefit to be derived from bathing the

face, night and morning, with strong salt and water—a tablespoonful of table-salt to a teacupful of water; by paying attention to the bowels; by living on plain, wholesome, nourishing food; and by taking a great deal of outdoor exercise. Sea-bathing, in these cases, is often very beneficial. Grubs and worms have a mortal antipathy to salt.

What To Do for Gum-boils.

A decayed root of a tooth sometimes causes inflammation and abscess of the gum, which abscess breaks, and thus becomes a gum-boil.

Foment the outside of the face with a hot camomile and poppy-head fomentation, and apply to the gum-boil, between the cheek and the gum, a small white bread and milk poultice which renew frequently. Four poppy heads and four ounces of camomile blows to be boiled in four pints of water for half an hour, and then to be strained to make the fomentation. Cut a piece of bread, about the size of the little finger—without breaking it into crumb—pour boiling hot milk upon it, cover it over, and let it stand for five minutes, then apply the soaked bread over the gum-boil, letting it rest between the cheek and the gum.

As soon as the gum-boil has become quiet, by all means have the affected tooth extracted, or it might cause disease, and consequently serious injury of the jaw; and whenever the patient catches cold there will be a renewal of the inflammation of the abscess and of the gum-boil, and as a matter of course, renewed pain, trouble and annoyance. Moreover, decayed fangs of teeth often cause the breath to be offensive.

Removal of Corns.

The best remedy for a hard corn is to remove it. The usual method of cutting, or of paring a corn away, is erroneous. The following is the right way: Cut with a sharp pair of pointed scissors around the circumference of the corn. Work gradually round and round and towards the centre. When you have for some considerable distance well-loosened the edges, you can either with your fingers or

with a pair of forceps generally remove the corn bodily, and that without pain and without the loss of any blood; this plan of treating a corn we can recommend to you as being most effectual.

If the corn be properly and wholly removed it will leave a small cavity or round hole in the centre, where the blood-vessels and the nerve of the corn—vulgarly called the root—really were, and which, in point of fact, constituted the very existence or the essence of the corn. Moreover, if the corn be entirely removed, you will, without giving yourself the pain, be able to squeeze the part affected between your finger and thumb.

When to Use the File.

Hard corns on the sole of the foot and on the sides of the foot are best treated by filing—by filing them with a sharp cutting file (flat on one side and convex on the other) neither too coarse nor too fine in the cutting. The corn ought once every day to be filed, and should be continued until you experience a slight pain, which tells you that the end of the corn is approaching. Many cases of hard corn that have resisted every other plan of treatment, have been entirely cured by means of the file. One great advantage of the file is, it cannot possibly do any harm, and may be used by a timid person—by one who would not readily submit to any cutting instrument being applied to the corn.

The corns between the toes are called soft corns. A soft corn is quickly removed by the strong Acetic Acid, which ought to be applied to the corn every night by means of a camel's-hair brush. The toes should be kept asunder for a few minutes, in order that the acid may soak in; then apply between the toes a small piece of cotton wool.

In the generality of cases the plans recommended above, if properly performed, will effect a cure; but if the corn, from pressure or from any other cause, should return, remove it again, and proceed as before directed. If the corn have been caused either by tight or by ill-fitting shoes, the only way to prevent a recurrence is, of course, to

have the shoes properly made by a clever shoemaker—by one who thoroughly understands his business, and who will have a pair of lasts made purposely for the feet.

Best Remedies to Destroy a Wart.

Pure nitric acid, carefully applied to the wart by means of a small stick of cedar wood—a camel's-hair pencil-holder—every other day, will soon destroy it. Care must be taken that the acid does not touch the healthy skin, or it will act as a caustic to it. The nitric acid should be preserved in a stoppered bottle, and must be put out of the reach of children.

Glacial Acetic Acid is another excellent destroyer of warts; it should, by means of a camel's-hair brush, be applied to each wart, every night just before going to bed. The warts will, after a few applications, completely disappear.

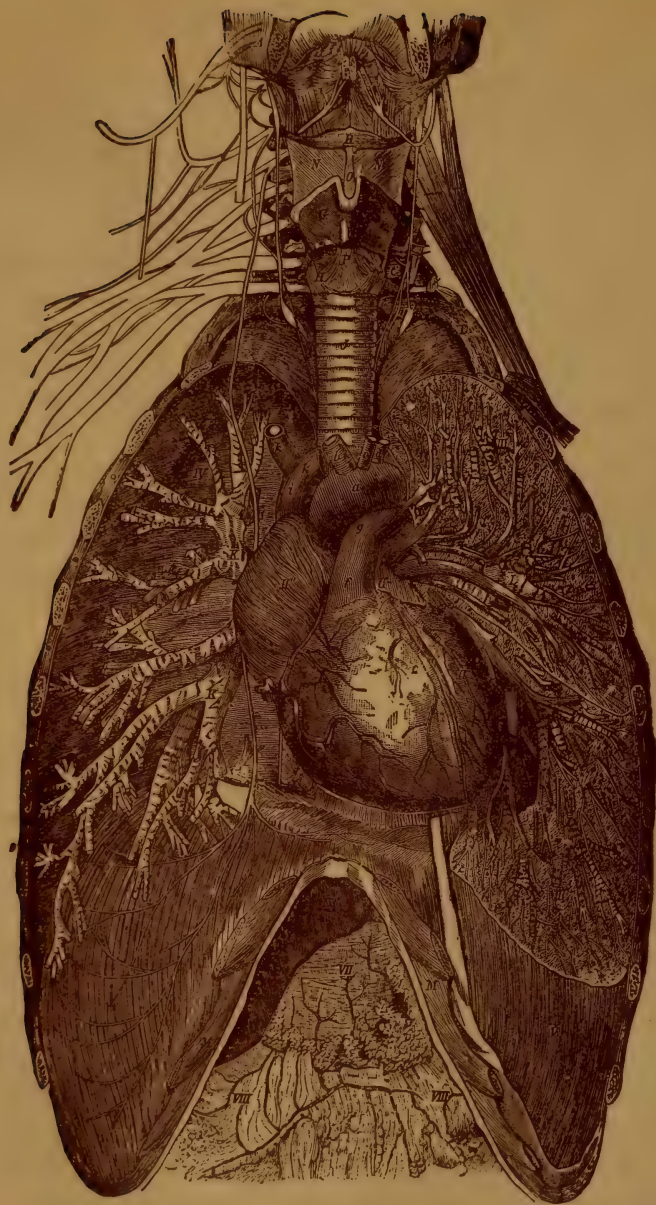
Weak and Delicate Young Ladies.

What are the causes of so many young ladies of the present day being weak, nervous, and unhappy? The principal causes are—ignorance of the laws of health, nature's laws being set at nought by fashion and by folly, by want of fresh air and exercise, by want of occupation, and by want of self-reliance. Weak, nervous, and unhappy. Well they might be. What have they to make them strong and happy? Have they work to do to brace the muscles?

The diseases peculiar to girls are Chlorosis, or Green-sickness, and Hysterics. Chlorosis is caused by torpor and debility of the whole frame, especially of the womb. It is generally produced by scanty or by improper food, by want of air and of exercise, and by too close application within doors. Here we have the same tale over again—close application within doors, the want of fresh air, and of exercise. When will the eyes of mothers be opened to this important subject—the most important that can engage their attention.

The remedies for this have been named, and when properly applied will prove to be effectual.





THE HEART AND LUNGS.

If health were more and fashion were less studied, chlorosis would not be such a frequent complaint. This disease generally takes its rise from mismanagement—from nature's laws having been set at defiance. We have heard a silly mother express an opinion that it is not genteel for a girl to eat heartily. Such language is perfectly absurd and cruel. How often, too, a weak mother declares that a healthy, blooming girl looks like a milkmaid. It would be well if she did. How true and sad it is that a pale, delicate face, and clear eyes, indicative of consumption, are the fashionable *desiderata* present for complexion.

Nature's Greatest Beautifier.

A growing girl requires plenty of good nourishment—as much as her appetite demands ; and if she have it not, she will become either chlorotic, or consumptive, or delicate. Besides, the greatest beautifier in the world is health ; therefore, by a mother studying the health of her daughter, she will, at the same time, adorn her body with beauty. We are sorry to say that too many parents think more of the beauty than of the health of their girls. Sad and lamentable infatuation.

Nathaniel Hawthorne, our distinguished American, gives a graphic description of a delicate young lady. He says : “She is one of those delicate, nervous young creatures, not uncommon in New England, and whom I suppose to have become what we find them by the gradually refining away of the physical system among young women. Some philosophers choose to glorify this habit of body by terming it spiritual ; but in my opinion, it is rather the effect of unwholesome food, bad air, lack of out-door exercise, and neglect of bathing, on the part of these damsels and their female progenitors.”

Nathaniel Hawthorne was right. Such ladies, when he wrote, were not uncommon ; but within the last few years to their great credit, be it spoken, “a change has come o'er the spirit of their dreams,” and they are wonderfully improved in health ; for, with all reverence be it spoken, “God helps them who help themselves,” and they have helped themselves by attending to the rules of health.

"The women of America," says an excellent authority, "are growing more and more handsome every year for just this reason. They are growing rounder of chest, fuller of limb, gaining substance and development in every direction. Whatever may be argued to the contrary, we believe this to be a demonstrative fact. When the rising generation of American girls once begin to wear thick shoes, to take much exercise in the open air, to skate, to play more, and to affect the saddle, it not only begins to grow more wise but more healthful, and which must follow as the night the day—more beautiful."

If a young girl had plenty of wholesome meat, varied from day to day, either plain roast or boiled, and neither stewed, nor hashed, nor highly seasoned for the stomach; if she has had an abundance of fresh air for her lungs; if she had plenty of active exercise, such as skipping, dancing, running, riding, swimming, for her muscles; if her clothing were warm and loose, and adapted to the season; if her mind were more occupied with active and useful occupation, such as household work, than at present, and if she were kept calm and untroubled from the hurly-burly and excitement of fashionable life, chlorosis would almost be an unknown disease. It is a complaint of rare occurrence with country girls, but of great frequency with fine city ladies.

When sickness comes, intelligent efforts must be made to master it. Many of the achievements of the healing art to-day read like miracles. There is something charming and delightful in the feelings of a patient recovering from a severe illness, it is like a new birth; it is almost worth the pain and anguish of having been ill to feel quite well again; everything around and about him wears a charming aspect and a roseate hue.

"See the wretch that long has tossed
On the thorny bed of pain
Again repair his vigor lost,
And walk and run again.
The meanest flow'ret of the vale,
The simplest note that swells the gale,
The common air, the earth, the skies,
To him are opening Paradise."

PART IV.

FEMALE BEAUTY AND ACCOMPLISHMENTS.

CHAPTER XXV.

PERSONAL APPEARANCE.

A Subject of Universal Interest—Looking Only to Immediate Effect—How to Assist Nature—Fashionable Ignorance—Nostrums and Quack Cosmetics—Evening Dissipation—Exposure of Health—A Simple Toilet the Best—Harmful Dress—Barbarous Decorations—Conditions on which Personal Beauty Depends—Neglect of Mind and Body—Cleanliness—Temperance in All Things—Turning Night into Day—Abuse of Digestion—Sickly Paleness—How Female Loveliness is Lost—Delicate Women—Painted Simpletons—Derangement of the Pulse—Hygiene of the Greeks.

MUCH labor is frequently employed, and much expense incurred, to improve and preserve the personal appearance, and to endow it with new charms, or to increase those which it already possesses. Unfortunately, however, although much thought and ingenuity are often expended, or rather wasted, on the subject, the peculiar conditions, physiological, hygienic, and social, on which female beauty depends, are either only slightly regarded, or partially acted on, when known, and more frequently neglected altogether.

With some persons, immediate effect, at whatever sacrifice, and irrespective of consequences, is deemed of more importance than either health or personal cleanliness, or appropriate modes of dressing; and in few, indeed very few, instances is anything beyond the "mere outside effect of the passing hour" for a moment regarded. Hence it is, that, in scarcely any other portion of the daily routine of life do persons

more egregiously err than in the means they adopt to carry out their wishes in this respect.

In general, not a single thought is devoted to the vital functions of the body, or to the structure and offices of the parts to which they devote their most laborious efforts ; yet, on a due attention to these points, both health and the personal appearance—even beauty itself—depend. “Are the means I employ natural, or do they assist nature ? —are they the most efficient and rational ?—are they harmless or injurious ?”—are questions that are seldom self-asked in the privacy of the boudoir, dressing-room or bed-chamber.

And why is this so ? A reply could be easily given, and we have no doubt many of our readers can furnish one. Habit and example, and thoughtlessness and indolence, and not infrequently ignorance and vanity are the powers which generally occasion the various conceits, practices and negligence just alluded to.

Nostrums and Cosmetics.

Although there is not a single subject on which people generally exhibit, in private, more anxiety than on their toilet, or one in which they are more deeply interested than their personal appearance, there is, perhaps, none on which they take so little trouble to obtain correct information. The fashionable belle and the anxious beau alike adopt the suggestions of some ignorant coquette or “dude,” and submit themselves to cosmetic treatment, with a degree of resignation and satisfaction, if not of delight, which under any other circumstances would be truly enviable.

Others, as well as those just noticed, scan with eager eyes the advertising columns of the morning papers in search of some expensive and often injurious nostrum, which its vendor boldly proclaims possesses the power of imparting beauty and renewing the bloom of youth and health upon the faded cheek, or of conferring the luxuriance and rich tints of Circassia or Georgia on hair which dissipation or the hand of time has rendered scanty or streaked with gray. The thoughts of such parties are entirely confined to the passing moment,

the next *soirée*, the next ball, the next promenade or the next opera ; and, as observed by a recent eminent author, their vision beyond these events becomes entirely dimmed.

But the errors in these matters arising from indolence, thoughtlessness and indifference to consequences—the desire to save time, trouble and expense—are greater than those already mentioned, and are probably more numerous than all the others put together. Hence it is that every fashionable ball or party, every opera-night and every concert adds to the number of the hapless victims of consumption or some other fell disease, and tinges the pallid cheek with the hectic flush or the sallowness that marks their incipient stages.

Improprieties of Dress and Toilet.

With some persons—perhaps, we might say with most persons—the duties of the toilet are of a very simple character, being limited to mere acts of cleanliness, and the use of the ordinary hair and skin cosmetics. Others go further, but it is all in the same direction ; their thoughts not extending to those numerous and more important matters without which a pleasing personal appearance, much less beauty, cannot long exist. Among unpolished and ignorant people this is more especially the case. As civilization and refinement and education advance, this attention, or rather misapplication of the attention, lessens.

This is particularly the case where the art and science of medicine and physiology have made much progress. In our own country and elsewhere, during the last half-century, the members of the medical faculty have continually directed public attention to improprieties of dress and the toilet ; and happily with such success, that much of the grossness in these particulars that distinguished former periods has gradually died out and passed away.

Many articles of dress, and practices which were once thought useful or beneficial, or at the most harmless, have thus been exposed, and their use either abandoned or rendered less injurious by the removal of their objectionable features. The present century is pro-

verbially one of progress, and, perhaps, in no one point is it more distinguished than in the improvement which it has produced in the social manners, dress and toilet of the people.

In the infancy of society and in savage life, immediate effect is the only object desired or thought of. Consequences are not regarded, from not being investigated and known. Pigments are adopted, bandages and compression used on various parts of the body, without the slightest hesitation, or reference to **their** ultimate effects. And when consequences were observed, they were generally put down to any cause but the right one, and arguments were not wanting to lessen the apparent evils, or to palliate their continuance.

Due to Vanity and Ignorance.

This palpable incongruity between reason and action is certainly surprising; it is surprising that such should ever have existed, but it is still more surprising that such usages, even in a modified form, should have been transferred from barbarism to civilization. Their existence, in any shape, in countries in which civilization and refinement have made the greatest progress, must depend on individual vanity and ignorance, and not be chargeable to the general community.

In every stage of society, in all ages of the world, the labors of the husbandman have been directed toward the improvement and permanent welfare of his crops and live-stock, and not to mere present appearance, hasty development or gaudy growth. He regards them in every aspect, and under every circumstance, of climate, season, soil, and the previous and present condition of each class he nurses or cultivates. Without this he knows that his crops, or the produce of his labors, will be defective and unprofitable.

Interest leads him to this course. The blessings of increased fertility and prolificness and a more abundant harvest are his reward. Is it not wonderful, then, that when the interests of their own bodies are concerned, when the health and personal appearance are at stake, not only for a period, but probably for life, that rational beings should

be so careless of themselves, and so indifferent of the future, when they exercise so much care over the humbler objects of creation?

The habits of life of many persons are justly said to be utterly opposed to the permanent enjoyment of health, and utterly subversive of the conditions essential to the existence and permanence of personal beauty, or even a pleasing appearance. With others, the dress is such as to prove equally prejudicial; and with an equally large number the system and means employed in the daily operations of the toilet are not less objectionable.

You Should Know Yourself.

The apparent neglect and indifference just alluded to is correctly stated, by a recent high authority, to be not occasioned by any direct or intentional disregard of the importance of the subject—not that persons care little whether they be right or wrong: on the contrary, it arises simply from the general apathy and contempt with which it is the habit of most persons to treat any examination into the nature and principles of matters connected with daily life; any mixture of science with matters falsely supposed to be necessarily trite and unworthy of serious consideration.

Some persons will evince much pleasure in attending a popular scientific lecture on some subject probably too abstruse for them to understand; but to devote a few minutes to the chemistry of their homes and every-day life, or to the structure and functions of their own bodies, or the physiology of their own existence, would excite in them a smile. We are apt to associate the familiar with the trite and vulgar, and to be vulgar would outrage the feelings of the veriest fop or belle in existence. But if familiarity be capable of producing the vulgar and the trivial, then life, health, beauty, even intellect itself, must indeed be both.

Such facts and arguments as these are indubitable. From infancy to age—from poverty to wealth—health, cleanliness, personal comfort, and a pleasing appearance, are, and must ever continue, the first matters of consideration. The welfare of the infant, the child, the

youth, the adult, are, in different degrees, dependent on them. They are also necessary to the aged, and perhaps even more so ; not merely for their own well-being, but on account of those younger than themselves around them.

By rigid attention to them, and by a judicious occupation of the mind on pleasing subjects, instead of letting it fall back upon itself, much of the vigor and agreeableness of youth may be retained to a late period of life.

Essentials of Sound Health.

In the personal and social duties just referred to, there is no royal road to pursue—no real secrets to learn. We have only to divest ourselves of the bias which custom or habit, or example, has impressed on us, and to follow the natural instincts of our nature, as directed by science, experience, and reason. There are certain matters necessary to life, and essential to our well-being, such as air, food, sleep, exercise, retention and excretion, the passions, etc., which, from not actually forming a part of the living body, were called by the older physicians the “non-naturals.”

Attention to these is as essential to the preservation of the health as it is to life ; and through the health, of the personal appearance and comfort of the individual. These are matters, indeed, which are not merely essential auxiliaries of the qualities and endowments referred to, but are actually the very foundation on which not only they, but even the enjoyment of life, depends. Look, for instance, at the influence which temperance, exercise, regular habits, and cleanliness, exert on the health and personal charms.

Let us go into fashionable life, as affording strong examples of the neglect or disregard of all of these except the last one, and that in a quarter where we might reasonably, from the rank and education of the parties, the least expect to find it. Temperance includes moderation at table, and in all the enjoyments which the world calls pleasure ; and regular habits include the recurrence of the appropriate meals at proper intervals, and the avoidance of late hours. These are things,

which are, unfortunately, utterly disregarded among the better classes of society, and more particularly in fashionable life.

Let us follow a youthful beauty of rank and fashion from the time of rising in the morning until her artificial day is ended, during what is called the "season." In a state of languor and nervous feverishness, and with a feeble appetite, the results of the late hours and excitement of the preceding night, she enters the breakfast-room at the early (!) hour of nine, or, more generally, ten or later. Her breakfast probably consists of strong coffee with cream, hot rolls (!) and butter, and perhaps, occasionally, a small portion of grilled fowl, all of which, except the coffee, she has scarcely sufficient energy to take and no appetite to enjoy.

Damaging Food and Adulterated Drinks.

Then a long exhausting fast not infrequently succeeds, ending in dinner at six or seven in the afternoon or evening, the day, up to this hour, being miscalled morning in fashionable life. At dinner she sates her appetite, rendered keen by long privation, with highly-seasoned soups, fish covered with melted butter and exciting sauces, meat roasted, boiled, fried and stewed, game, pies, puddings, tarts, preserves, followed by the grapes, oranges, indigestible almonds and filberts, ice-creams, and other fruits and delicacies that form the dessert; the whole being diluted and blended, and finally "washed down," not merely with water from the crystal fount, but with wine, generally more or less adulterated or poisoned by trade-admixtures, miscalled improvements.

Then come the evening's amusements—the soirée, the ball, the opera, the theatre, the late supper—exposure, thinly clad, to rapid transitions of temperature and draughts, in passing from the heated room or building to the carriage, and the journey in the carriage home, at which she arrives during the early hours of the morning, and sometimes not until the sun has risen, and the healthy working girl has commenced her labor for the day. Then comes the operation of being unrobed and unjewelled, before she can retire to bed—

a bed into which she sinks almost helpless and exhausted, and from which she rises feverish and unrefreshed.

Is it any wonder that such a mode of living should, ere long, derange the stomach, and, by creating bilious disorders, gradually tinge the skin with a wan or sallow hue? Is it any wonder that such long fasts, such injudicious feeding, such exhausting habits, such late hours, such exposure, the conversion of night into day and day into night, and the want of sufficient rest and sound sleep, should soon become visible in the features, and make the looking-glass of the fashionable belle a monitor—alas! an unheeded monitor—of her gradually waning charms and health?

Sallow Faces and Scrawny Leanness.

Under such habits as those just described, it is no wonder that the firm yet delicate texture of the skin gives place to flabby softness, and those delicate portions on which personal beauty depends yield to scraggy leanness or ungraceful, shapeless fat. The once fair skin assumes a sickly paleness and an uninviting rigidity, or a coarse and bloated redness, according to the particular constitution of the victim, but which, in their incipient forms, the vain, deluded creature regards as the mere maturing of her health and beauty.

To repair their ravages, the aid of a dressmaker and the cosmetic artist is called in. There is padding to give shape or plumpness where there is none; corsets and belts to reduce, by compression, the exuberant mass of flesh; and washes, powders, and paints, to rectify the dingy, pallid, or coarse complexion. But all this is useless; high living, late hours, immoderation, and dissipation have done the work, and female loveliness is lost forever, unless the pursuit of pleasure be at once abandoned, and moderation and regular and natural habits be returned to.

Though a lady be as fair as Hebe, as graceful and chaste as Diana, and as beautiful and fascinating as Venus herself, she would soon lose her loveliness and charms by indulgences and habits such as these. Were it not for the greater cleanliness of the fashionable classes, the

frequent use of the bath, and their being better clothed than their less fortunate brethren, the consequences of their violations of the natural laws would fall on them even more heavily than they now do.

Let us mark the effects of improper food, defective ventilation, and want of cleanliness. These evils exhibit themselves in the unhealthy features, the broken health, the frequent cases of consumption, fevers, and skin diseases, and other ailments affecting the health and personal appearance, so commonly met with. It is only the active nature of their occupations, and the pecuniary inability of most of such persons to indulge in excesses, either in eating or drinking, that prevent these things being still more common than they already are.

The immediate and intimate relations of health to the personal appearance cannot be too often pointed out, and should be thoroughly understood and acted on in the every-day affairs of life.

The True Basis of Personal Beauty.

Health is soundness of body, with the due performance by its several parts of all their natural functions, both separately and in unity. This is "bodily" or "physical health." A like perfect exercise of the functions of the mind constitutes "mental health." The union of the two is necessary to the development of beauty, and to the existence of true corporeal and mental enjoyment.

Unsoundness of the body, or the disorganization of any of its functions, generally produces a corresponding effect upon the mind, in some portion or other of its manifestations and uses; and when the mind is seriously diseased, the bodily health frequently, indeed generally, degenerates.

The exceptions chiefly include those rare and vast developments of the mind commonly called "genius," though even these are generally accompanied with a delicate state of health, and sometimes with disease; and those striking exhibitions of bodily health and vigor, where "reason seems to have given up half its dominion to instinct and muscular strength." In each case there is exaggeration of the one and defect of the other. Perfect health exists only when the functions

of both body and mind are properly exercised, and duly balanced to each other.

Disease, either "physical" or "mental," is the reverse of health. Any unsoundness, any disarrangement, organic or functional, involves its presence. The existence of disease, or even of any defect of health approaching it, is soon developed in the features, and is, therefore, injurious to the personal appearance, and is incompatible with the existence, or, at all events, the permanency of personal beauty.

On the promotion and preservation of the health chiefly depend the improvement of the personal appearance, and the maturity and maintenance of personal beauty. The delicate nature of the formation and functions of the human body is such that propriety and regularity of dress, living, and the like, are of more importance than is generally supposed, or than some members of the medical profession are ready to admit. Do not abuse your own body.

Why Personal Charms Decay.

It is, however, a demonstrable fact, that, apart from the vicissitudes of climate and season, and mere accidental circumstances against which foresight is unable to guard, the neglect of these matters is alone sufficient to account for fully one-half of the maladies and sufferings which "flesh is heir to."

The body must be properly nourished and its heat maintained by appropriate food; it must be properly clothed to meet the vicissitudes of climate, situation, weather, and individual constitution; it must be freely exposed to the influence of light, air, warmth, and the like, and it must be kept clean, and enjoy regularity and sufficiency of exercise, sleep, and all the habits necessary to mere animal as well as polished life, for the full exercise of its numerous delicate functions, and the possession of perfect health.

Without these matters are attended to, the health will fail, and no efforts of dressing, no toilet, however complicated and laborious, no subtle cosmetics will be capable of preserving the personal charms from certain and rapid decay.

The true criteria of the existence of health, and the "barometer" by which its energy may be estimated, are presented to man by nature in the personal appearance, freedom, and ability of muscular motion, and the possession of an unclouded mind. In like manner, the approach and inroads of disease, and even a state of delicate or indifferent health, are negatively perceptible by the diminution or absence of these qualities, and of the ordinary expression of the features.

A certain sign of disease or disordered health is to be found in the derangement of the pulse. It is known from observation and experience that the pulsations of the arteries depend on the alternating action of the heart, and are correspondent, if not actually synchronal, to it. Any deviation from the natural standard in the heart's action, therefore, affects the frequency and particular character of these pulsations, which thus furnish a ready index to the state of circulation, and through it to the condition of the body.

The Pulse Tells the State of the Body.

The pulse at the wrist, from the convenience of its situation, is that generally selected for examination. By simply counting the number of its beats per minute, and observing the particular manner in which they are given, a very good general idea may be formed of the state of the system at the time, even by the uninitiated, and thus the presence or approach of disease may be detected.

In health, the "pulse" of the adult varies from 60 to 80 beats per minute, unless it be excited or depressed by the influence of mental emotions. The average in the adult male is 72. If its rate is below 65, debility or a lax state of the system is indicated; and if it is habitually above 75, some exciting or disturbing cause may be suspected.

In females the pulse is usually lower than in males, 65 to 66 beats per minute being about the average; but in those of a feeble or lax habit it is not infrequently as low as 60.

In infancy and childhood the pulse is much quicker than in the

adult. During the "first twelve-month" it ranges from 105 to 125 beats per minute; during the "second year," from 90 to 110; during the "third year," from 85 to 100; whence its rate gradually lessens until the "sixth" or "seventh" year, when its average is 70 to 75, at about which it keeps for some years after. Towards puberty, it usually quickens and becomes excitable, after which it gradually settles down into the rate peculiar to the constitution or habit of the individual.

The pulse is instantly affected by mental emotions. Those of a violent and exciting kind frequently send it up to 130, or even 145 beats per minute; whilst those of a depressing nature will sink it to 50, and, in extreme cases, render it for a short time scarcely perceptible. Both of these extremes frequently kill—the first, by loading the vessels, particularly those of the brain, with blood; the other, by so retarding the circulation of the arterial blood, that there is an insufficient supply of it for the purposes of life. In some fevers the pulse reaches even 140 beats per minute. It also commonly varies a little during the day, being influenced by digestion, exercise, labor, sleep, rest, etc.

The blessings of health have been universally appreciated by mankind, and in the highest degree by those nations, ancient and modern, most distinguished for their civilization and refinement. Among the polished nations of antiquity the "principle of health" was deified, and was made an object of adoration and sacrifice. The "Hygeia" of the classical Greeks occupied a very notable place in their mythology, and in the most beautiful fictions of their poetry.

Under different names, her worship was general among all the ancient eastern nations. Her statues, which were numerous and of the most chaste description, represented her with a large serpent curled round her body, and drinking out of a cup which she holds in her hand, symbolical of her being the fountain of life and health.

CHAPTER XXVI.

BATHING FOR HEALTH AND BEAUTY.

Beauty a Thing to be Prized—Personal Cleanliness—Vast Influence of Soap and Water—Choked Perspiration—Secretions of Skin and Teeth—Contagious Poisons—Fruitful Sources of Ill-health—Impoverished Blood—The Tepid Bath—Ablutions Among Jews and Mohammedans—Dirt and Disease—Common Neglect of Bathing—Bath-houses in Europe—The Jolly Frenchman—Sea-bathing—Directions for Using the Warm Bath—Right Temperatures of the Water—Exercise and Beauty.

LET us again refer to the value—the importance—the divine influence of beauty in a world—a universe—where all is beautiful.

A recent writer on the subject has asked: "What is the use of beauty? Is it intended merely to amuse the fancy for a time, and then pall, fade, and be forgotten? In a system where nothing else is lost, where all is fitness and coherence, and where each part, however minute, seems as necessary to the whole as a single link is to the continuity of a chain, is this quality alone without definite meaning or permanent purpose?" And he answers the question by observing that "analogy is against the supposition, and we must either set down beauty as an unmeaning superfluity in the scheme of the creation, or else assign it an importance commensurate with the space it occupies in our thoughts." Every rational man will do the latter.

"Then let us not, like thoughtless fools, despise
The things of earth which are the things of beauty.
All beauty here hath but one aim and mission—
To guide our spirits to that heavenly portal,
Which, to the earth-chained spirit, is a vision
Of beauty all unchanging, all immortal."

Cleanliness is a subject of such importance to our well-being that little need be said in its favor, were it not that many persons who loudly declaim about it are negligent of it themselves. That it is essential to the health, comfort, and personal appearance of the individual, is so generally admitted, that even those who do not practice

it are compelled, by their feelings of decency and propriety, to speak in its praise.

In favor of personal cleanliness it is impossible to speak too highly or to say too much. It enhances every charm, and creates new ones peculiar to itself. It invigorates all the numerous functions of the body and of the mind. It is capable of rendering the most ordinary agreeable, and even the sick and the deformed companionable. Beauty itself without its talismanic influence ceases to attract, or soon palls and satiates the senses it so lately ravished. It is a mark of politeness and good breeding, and is capable of inspiring the most refined sentiments, affections, and passions. Without it man is unfitted for social intercourse, and his presence in company would prove a manifest cause of offence.

Test of Civilization and Refinement.

It has been justly observed that, "the different nations of the world are as much distinguished by their cleanliness as by their arts and sciences. The more they are advanced in civilization and refinement, the more they consult this part of politeness." No one perfectly clean in his person can be absolutely disagreeable; whilst no amount of personal charms in features, figure, or complexion, can render an individual companionable without it.

Addison regarded cleanliness as the foster-mother of affection, and as the most enduring of all the auxiliaries of personal beauty.

"Beauty commonly produces love, but cleanliness preserves it. Age itself is not unamiable whilst it is preserved clean and unsullied; like a piece of metal constantly kept smooth and bright, we look on it with more pleasure than on a new vessel that is cankered with rust." But cleanliness is not only agreeable to others, and one of our social duties—it is pleasurable and serviceable to ourselves. Irrespective of its influence on the health and personal charms, its practice has been declared, by one of our recent and highest authorities, to be incompatible with many of the vices that prove destructive to both the body and the mind.

"Through the prevalence of custom the most vicious habits lose

their horror by being made familiar to us. On the contrary, those who live in the neighborhood of good examples, fly from the first appearance of what is shocking or vicious, and thus pure and unsullied thoughts are naturally suggested to the mind by those objects which perpetually surround us, when they are beautiful and elegant in their kind."

In its relations to health, personal cleanliness is of the very highest importance. During life, the skin is continually subjected to abrasion, and continually undergoing the processes of reproduction and decay, by which the cuticle or scarf-skin, its exterior portion, is being constantly thrown off, as effete and useless matter, in the shape of very minute scales of dust. This, mingling with the oily, saline, and aqueous matter of the perspiration, and the waste particles of the dress, dust, etc., acquires sufficient adhesiveness to attach itself to the surface of the body and to the clothing.

The Skin, Like the Lungs, Must Breathe.

In this way, unless the accumulation be daily removed by friction and washing, the channels of the perspiration become choked, and the functions of the skin, as a respiratory organ, interfered with, or even partially suspended. At the same time the clothing, and particularly the body linen, becomes loaded and contaminated with the exuviae of the skin, the solid portion of the perspiration, and the ordinary exhalations from the body, and unless frequently renewed, is rendered unwholesome and unfit for use. The hair, too, becomes loaded with scurf and dust, and the pores of the skin under it choked with the exuviae, etc., before referred to, by which the hair-bulbs "are strangled, as it were, in the performance of their natural functions."

The teeth "accumulate organic particles in their interstices, and their enamel becomes encrusted with the minute (microscopic) skeletons of animalculæ that populate the mucous secretions of the mouth." All these are prejudicial to health, personal beauty, and refined enjoyment, and may be removed by the simple acts of clean-

liness which should be practiced by all, and to which reference cannot be too frequent or urgent.

The ill consequences of uncleanness, and particularly of a dirty skin—a skin loaded and obstructed with adhering refuse matter discarded by itself—are numerous and serious. Such matter forms a favorable medium for the absorption, and the transmission to the internal portions of the body, of noxious effluvia, vapors and gases, miasmata, and the aërial germs of infectious and contagious diseases.

How We Become Poisoned.

It is said that the greater part of (contagious) poisons are conveyed to us through the external surface of our bodies; and it is fully proved that poison already communicated has been by cleanliness removed before it could actually produce any bad effects. We here allude, in particular, to frequent washing, bathing, rinsing the mouth, combing and brushing the hair, and often changing the linen, clothing, and bedding.

Such are the immediate effects of neglected ablution of the skin, and the neglect of other acts of personal cleanliness; the further consequences are of an equally serious character. The blood being deprived of one of its sources of oxygen, and of one of the outlets of its carbon and saline matter, becomes deteriorated, the functions of nutrition imperfect, and the temperature of the body lessened. The matters that should be thrown out of the system through the skin are retained, and have to be eliminated by other organs. The lungs, the kidneys, the liver, the bowels, are each, in their turn, overtasked to perform the functions of another organ.

At length they suffer from exhaustion, the health is disturbed, and incipient disease follows. The predisposition exists, and only waits for an exciting cause to give it full development. The period of incubation may be short or long—weeks, months, even years—according to the age and constitutional vigor of the person; but the evil day comes at last, and skin-diseases, nervous affections, diarrhœa, liver-complaints, consumption, dropsy, visceral obesity or some other

serious disease of the vital organs ensues, destroying the last remnants of beauty and rendering life uncomfortable, if not a burthen.

A lady of vast discernment and of equal experience in these matters, herself as lovely and fascinating as she was accomplished, in addressing her sister that formed her audience, observed: "An important, and, I might say, the principal receipt which I shall give you for the promotion and preservation of your beauty, is cleanliness, thorough cleanliness, in the most extended sense of the word. It is an indispensable thing.

"It maintains the skin in its softness, the complexion in its lustre and natural hue, the limbs in their pliancy, the whole frame in its vigor and fairest light, the mind in its purity and the spirits in the buoyancy of youth irrespective of age and condition. The frequent use of tepid water to the person, and particularly of the tepid bath, is not less grateful to the senses than it is salutary to health and beauty. It is by such ablutions that accidental corporeal impurities are thrown off, cutaneous eruptions removed, and, while the surface of the body is preserved in its original purity and brightness, many threatening and beauty-destroying disorders are prevented."

Religious Use of Water.

Washing or purification with water forms part of many of the ceremonies of the older religions of the world. Among the ancient Jews, ablutions were performed by both the priests and the people, and, with some modifications, they are still practiced by this strange people at the present day. The ceremony of "purification" by means of water is frequently referred to in the Old Testament. Among the Mohammedans, ablutions form part of their devotions, and are enforced in the Koran. It is generally thought that these ceremonies were originally instituted among the Jews, with the view of promoting the sanitary condition of the people, and that Mohammed followed the example of the Jewish lawgiver.

What further considerations and what further inducements than those just given need be offered to enforce the necessity of personal

cleanliness? And when it is added that no dirty or neglected skin can long continue healthy, and ceasing to be healthy must also cease to be beautiful and pleasing, the argument in favor of the daily ablution of the whole surface of the body, or of as large a portion of it as possible, with pure water, will surely be complete.

A Stimulant for Mind and Body.

However important and beneficial the free and frequent use of water for personal ablution may be, the effects arising from the immersion of the body in it, as in the practice of bathing, are far more extensive and complete. What the one does usefully, but not completely, the other accomplishes readily, satisfactorily, and perfectly. There is no absolute substitute for the entire bath. Its physiological effects are peculiar to itself, and of the utmost importance in hygiene, pathology, and medicine.

Nor is the action of judicious bathing in the promotion of personal comfort and happiness, and personal beauty, less remarkable. Intellectual and moral vigor are also gradually but materially influenced and promoted by its beneficial action on the system; for mind and conscience, being linked to matter in the "house we live in," become perturbed, or lethargic, in almost exact accordance with the fluctuations of our physical health.

The soul and mind cabined within the confines of a dirty skin can no more exercise their god-like prerogatives of highest reason and activity, than the prisoner in a felon's cell can exercise his limbs with the vigor and agility of a free man. Healthy imagination thus becomes dormant or extinguished, and conscience itself blunted or degraded into vice.

The comparative neglect of bathing continually furnishes a subject of comment. This neglect is an enigma as difficult to solve as the fabled riddles of the Sphinx. We are always talking about health, and continually professing to be seeking it; but the practical applications of the principles which we advocate, and the doctrines which we teach, are, unfortunately, the exceptions and not the rule.

In Europe, the bathing-houses are almost as numerous as the druggists' shops are in this country. Yet the French need the former less than we do, because they live more temperately, and are less ground down to think and work, and because they perform more general personal ablution with as much zeal as though it were a religious duty.

"The *Messieurs* are wise enough to discover that life is not rendered one jot sweeter by passing sixteen hours a day behind the desk or counter, to the exclusion of all recreation, except recreation be to count the gains of such excitement, or to indulge the hope of amassing a sufficiency to do the 'comfortable and important' at the close of a wearied life, which the infirmities of age forbid us to enjoy. A Frenchman lives, works, and enjoys himself to the last. Prince Talleyrand died in armor; his life was a bouquet from which all but the sweetest flowers were excluded."

French and Americans Contrasted.

A Frenchman knows no ill but what pleasure denies. He rarely has dyspepsia, gout, rheumatism, or fevers. Half his life is spent in Elysium—half ours in purgatory. Indigestion, headaches, nervousness, restless nights—the "blues" when awake, and the "terribles" when asleep—fall to the lot of the mind-absorbed and money-making American, whilst our lively Parisian, with his light meal and still more lightsome body, finds trouble only in broken limbs, or in positive starvation.

The preceding recommendation of bathing applies chiefly to the warm bath and the tepid bath, which are alike adapted to the delicate and the robust, and to every condition of climate and season. Cold bathing, in this climate, is only suited to the most healthy and vigorous, and can only be safely practiced during the warmer months of the year, and in a mass of water that has been for some hours exposed to the rays of the sun, and sufficiently large to permit of the heat of the body being maintained by swimming or other active exercise.

The shower-bath is an exception to these remarks, and is a convenient and invigorating substitute for other forms of bathing. The

plunge-bath is also a partial exception; but it should be carefully avoided by those who are predisposed to heart disease or brain disease, or to congestion of any of the great viscera. We have known several fatal cases of apoplexy caused by it. Sea-bathing, from its stimulating and invigorating action on the skin and the whole nervous system, is not only most agreeable, but highly salutary, when indulged in at the proper season. It has also the important advantage over bathing in fresh water, that persons seldom take cold from it.

Sea-bathing, on account of its stimulative and penetrating power, may be placed at the head of those means which regard the care of the skin; and it certainly supplies one of the first wants of the present generation, by opening the pores, and thereby re-invigorating the whole nervous system. Besides its great power in cases of disease, it may be employed by those who are perfectly well, as the means most agreeable to nature for strengthening the body and preserving the health. As an agent for promoting and preserving the softness and delicacy of the healthy skin, and the bright hues of complexion, it is, however, inferior to the warm bath and the tepid bath.

Soft Water and Good Soap.

For ordinary bathing to produce its best effects, the water should be soft and pure, and a little good soap sparingly but regularly employed whenever the state of the skin requires it. Hard water tends to make the skin rough and course, and is not so cleansing as pure, soft, natural water.

After leaving the ordinary bath, a tepid, or even a cold shower-bath, may be taken with advantage. By employing distilled water for the latter, either alone or combined with a little rose-water (*eau de rose*), or orange-flower water, the luxury and effectiveness of the bath is increased. The addition of three or four ounces of glycerine to this water further improves it, and causes it to impart to the skin a delicacy, and a delightful sensation of softness, obtainable by no other means.

The opinion that the warm bath is relaxing, which we sometimes hear expressed by those who are practically unacquainted with its use,

is erroneous. It is only so when persons remain in it too long, or take it too often. As a rule, fifteen to twenty minutes is a sufficiently long space of time to indulge in it; and the best part of the day is either immediately before retiring to rest, or before dressing in the morning; preferably the first, as a night of refreshing sleep is almost sure to follow it.

Neither this nor any other bath should be taken on a full stomach, nor soon after a meal. It is better to allow a couple of hours to elapse before doing so. Nor are those who indulge in a warm bath more liable to take cold than others. On the contrary, they are less so, unless they wilfully expose themselves, insufficiently clad (particularly about the neck and chest), to draughts of cold air.

Right Temperature for Bathing.

The warm bath and the tepid bath are adapted to every age of life. The first is particularly congenial to the young, the delicate, and those declining in years. By means of it these last can often not only retard the effects of time upon them and prolong their lives, but preserve to themselves the faculties and personal feelings and enjoyments of their former years to a ripe old age.

The Duke of Wellington, after leading the trying life of a soldier and a man of the world until about the middle age, adopted the practice of taking a warm bath daily, and thus preserved his faculties and surprising vigor until the period of his death, an event which happened from an accidental surfeit, rather than from decay by age.

It may be useful to the reader to know the ranges of the temperature of water appropriate to the respective baths. These are given in the following table:

Name.	Temperature Fahrenheit.	
	Range.	Common average.
Cold bath	33° to 75° . . .	50° to 55°
Temperature bath .	75 „ 82 . . .	78 „ 80
Tepid bath	82 „ 90 . . .	85 „ 86
Warm bath	90 „ 98 . . .	93 „ 94
Hot bath	98 „ 112 . . .	105 „ 106

The preceding remarks have reference to personal cleanliness, but it may be also observed here, that domestic or household cleanliness is scarcely less important. Without it the air within our homes would be perpetually vitiated, and the blessings of light and ventilation, and of salubrity of situation, rendered abortive.

Of public cleanliness it has been said that it does the same for our streets and our highways that the others do for our persons and dwellings. Without it the purity of the air of our cities and towns would be impaired and rendered insalubrious, and, in many cases, actually noxious and pestilential. All these forms of cleanliness are essential to the health, happiness, and well-being of man living in civilized communities.

Another subject to which we will briefly allude, before closing this chapter, is exercise—exercise in the open air, in situations exposed to refreshing breezes and the genial sunlight. Without this all other efforts to preserve the body in vigorous health fail. It is a natural tonic and cosmetic, and is essential to give the glow of health to the otherwise pallid cheek, and to keep it there.

Nature teaches us, in the gambols and sportiveness of the lower animals, that bodily exercise is necessary for the growth, vigor, and symmetry of the frame; whilst the too studious scholar and the indolent man of luxury exhibit in themselves the pernicious consequences of the want of it. Many a rich lady would give thousands of dollars for the full-rounded arm and the peach-bloom on the cheek of her kitchen-maid. Well! might she not have had both by the same amount of exercise and the simple and natural mode of living?

The poet tells us that—

“Health is the vital principle of bliss,
And exercise of health.”

CHAPTER XXVII.

BEAUTIFUL SKIN AND COMPLEXION.

A Garment of Surpassing Loveliness—Structure of the Skin—Pores for Perspiration—Absorbent Vessels—How to Beautify the Skin—Effect of Heat and Cold—Ablution—Anointing—Recipes for Skin Washes—Effect of Sunlight—Benefits of Friction—Flesh-gloves—Diseases of the Skin—Black Spots and Marks—Boils—Blueness and Discolorations—Dandruff—Pimples—Itch—Scaly Eruptions—Treatment for Skin Ailments—Freckles—Moles—Paleness—Roughness—Redness—Scurf and Scurvy—Pits from Small-pox—Wrinkles—Abrasions—Bruises—Burns and Scalds—Cuts and Incised Wounds—Excoriations—Frost-bites—Scars.

EVERY person knows what the skin is, its external appearance and its general properties ; but there are many of our readers who may not be aware of its peculiar and wonderful construction, its compound character and its manifold uses. It not merely acts as an organ of sense and a protection to the surface of the body, but it clothes it, as it were, in a garment of the most delicate texture and of the most surpassing loveliness.

In perfect health it is gifted with exquisite sensibility, and while it possesses the softness of velvet and exhibits the delicate hues of the lily, the carnation and the rose, it is nevertheless gifted with extraordinary strength and power of resisting external injury, and is not only capable of repairing, but of actually renewing itself. Though unprotected with hair, wool or fur, or with feathers, or scales, as with the brute creation, the human skin is furnished with innumerable nerves, which endow it with extreme susceptibility to all the various vicissitudes of climate and of weather, and prompt the mind to provide suitable materials, in the shape of clothing, to shield it under all the circumstances in which it can be placed.

The horse, the dog, the lion, cannot change its hair or the bear its fur, even though it be transported to a climate the reverse of that in which it was born ; it must alike wear the robe of Nova Zembla under

the scorching sun of Africa, or that of the tropics on the frozen plains of Siberia, and it will dwindle from this change, and probably perish; but man can suit his clothing to the latitude, and rove from clime to clime with comparative impunity. His intelligence enables him to shield his skin from all the "skyey influences" with proper raiment, and his taste leads him so to select and prepare this raiment as to serve both for the protection and adornment of his person.

Three Layers or Membranes.

The skin, though apparently a single membrane, is composed of three distinct layers or membranes, each of which has special duties to perform. The exterior of these, or that one which immediately meets the eye, is called the cuticle, epidermis or scarf-skin. It is of uneven thickness, in some parts being extremely thin and delicate, and in others, particularly those exposed to friction, thicker and harder; in this respect being accommodated to the nature of the part it covers. It is an albuminous tissue, and in its general physical and chemical properties, for the most part, resembles the nails and the quills of birds, from which it differs chiefly in degree of induration.

It is destitute of feeling and of absorbent power, and thus fulfils its duty as a protective covering of the body in a more effective manner than it otherwise would do. Throughout its whole surface it is thickly pervaded with minute pores, to permit the escape of the perspiration and other exhalations from the body. Its reparation and renewal are carried on at its under surface, whilst its damaged, worn-out and useless portions are thrown off in the form of whitish dust or minute flakes or scales.

Immediately under the cuticle, and resting on the cutis, is the mucous network. It is a thin layer of soft, pulpy matter, of a fibrous character and reticular form, and appears to be the seat of the color of the skin, with the hue of which it always coincides. It may be temporarily blanched by the action of weak solutions of chlorine, chloride of lime, and other bleachers.

Beneath the mucous network, and forming the third, last in succession

inwards, and principal tegumentary covering of the body, is the *derma* or true skin. It is a highly sensitive, vascular, gelatinous texture, of a very complex structure. It is of a whitish color and fibrous, and appears to be made up of an irregular species of network. Closer examination shows it to be composed of condensed cellular tissue, and to be very thickly supplied with absorbent and excretory vessels, and with arteries, veins, and nerves.

A Most Delicate, Perfect Structure.

It is here that the minute capillaries of the arteries spread themselves out, and, by means of the ducts of the sudorific glands or follicles, exhale the peculiar secretion which we call perspiration ; here the so-called roots of the hair terminate, and find nourishment ; and here all the other functions of the skin are performed. It is this portion of the tegumentary covering of the body that gives the relative thickness to the whole skin ; and it is the one which, when the scarf-skin and hair are removed, is converted into leather by the processes of tanning.

Such is the general structure of the human skin, so complicated and yet so perfect, so delicate and yet so useful. As a protective natural covering of the body, in conjunction with the animal senses, instincts and appetites, and, above all, with an intelligent free-will, it surpasses that of any other animal. It is absolute perfection. It combines within itself the powers of an organ of sense, of excretion, secretion, respiration and nutrition. The integrity of its functions is not only highly conducive to health, but is absolutely essential to its perfect enjoyment, to both corporeal and mental vigor, and to beauty. Surely the preservation and promotion of this excellence, and the removal or alleviation of the effects of disease and accident that impair it, deserve our serious attention.

In health, the management of the skin is extremely simple, and consists chiefly in habitual cleanliness and daily personal ablution, as noticed in the preceding chapter. To preserve the softness of its texture, and the delicacy of its hues, it is also necessary to protect it,

as much as possible, from external influences and all external accidents capable of injuriously affecting it.

Exposures to the extremes of heat and cold, sudden and extreme changes of temperature, and the vicissitudes of weather and climate, tend to destroy its natural sensibility, to thicken and harden it, to render it coarse and rough, and, by causing the obstruction and rupture of its capillary arteries, to impart to it a streaky, ruddy, weather-beaten appearance. Drying winds, whether hot or cold—the east and northeast, for instance, in this climate—also prove injurious, by carrying off the moisture which is essential to its suppleness and proper action ; and this, in extreme cases, to a degree sufficient to destroy its vitality, and even to produce chaps or fissures in it.

How Sunlight Affects the Complexion.

On the other hand, continual exposure to a moist atmosphere, or humidity or aqueous vapor in any form, tends to relax it, to reduce its tone and hue, and to render it injuriously susceptible to the temperature of the surrounding air, as well as to changes of it. Light and shade also affect the skin, but in opposite ways. Constant exposure to diffused daylight and to sunlight, when not too vivid, for some little time daily, is favorable to the health and beauty of the skin, and improves the hue of the complexion ; but the direct rays of the sun, particularly the summer sunshine, when long continued, thicken and darken it, and sometimes, in persons peculiarly susceptible, even blister it, or cause the hardened cuticle to exfoliate.

An insufficient exposure to light, on the contrary, causes the skin to assume a pale and sickly hue, and to become lax and unhealthy. To obviate the ill effect of the exposure and external influences just alluded to, the dry skin, after ablution or bathing, may be slightly anointed with some mild, simple oil, as that of the olive or the sweet-almond, as in the last operation of the ancient Roman bath, friction being at the same time employed, and the whole surface subsequently gently wiped with a napkin or towel. Modern chemistry has, however, furnished us with glycerine, a substance which may be used

instead of oil, and has the advantage of being more cleanly, effective and congenial to the skin.

By diluting this article with five or six times its bulk of pure water we have a wash or lotion which is not only capable of imparting delicacy, suppleness, and an agreeable sensation to the skin, but also of preserving it, to a very great extent, from the effects of heat and cold, drying winds, fervid sunshine, etc., as well as by its permanently softening power, preventing its induration from friction or pressure, and the formation of callosities on it. For this purpose the skin need only be thoroughly moistened with it, the excess of moisture being subsequently removed by means of a soft towel.

Light and Beauty.

The importance of the due exposure of the body to daylight or sunlight, just referred to, cannot be too strongly insisted on. Light and warmth are powerful agents in the economy of our being. The former especially is an operative agent on which health, vigor, and even beauty itself depend. Withdraw the light of the sun, with its actinic or chemical rays, from the organic world, and all its various beings and objects would languish and gradually lose those charms which are now their characteristics. In its absence, the carnation-tint leaves the cheek of beauty, the cherry-hue of the lips changes to a leaden-purple, the eyes become glassy and expressionless, and the complexion assumes an unnatural cadaverous appearance that speaks of sickness, night, and death.

So powerful is daylight, so necessary to our well-being, that even its partial exclusion, or its insufficient admission to our apartments, soon tells its tale in the feeble health, the liability to the attacks of disease, and the pallid features—vacant and sunken, or flabby, pendent, and uninviting—of their inmates. Even the aspect of the rooms in which we pass most of our time, and the number or extent of their windows, is perceptible, by the trained eye, in the complexion and features of those that occupy them. So in the vegetable world—the bright and varied hues of flowers depend on the sunlight.

In obscure light plants grow lanky and become pale and feeble, they seldom produce flowers, and uniformly fail to ripen their seeds. In even partial darkness the green hue of their foliage gradually pales and disappears, and new growths, when they occur, are blanched or colorless.

It is here also worthy of remark, that those persons who spend most of their time in apartments with an aspect ranging from the northwest to the northeast, and to which the direct rays of the sun thus never penetrate, are generally of pale complexion, with a languid expression of the features, and enjoy less vigorous health than those otherwise circumstanced. This is particularly the case with artists, whose studios are usually chosen with a northern aspect, for the sake of the equable and diffused daylight thus secured.

Fevers and pestilential diseases generally, are always more frequent and severe among the inhabitants of such apartments than among those exposed for hours daily to the light of the sun. The actinic, or chemical rays of sunlight, are absolutely necessary to the enjoyment of vigorous health and the possession of beauty. The diffused light from a northern sky is deficient in these rays.

Best Method of Ablution.

The best method of keeping the skin clean and healthy by ablution and baths has been already generally alluded to, but here some further details may be given. The use of these, and the washing of the skin that forms part of the daily duties of the toilet, appear to be very simple matters, but writers on the subject differ in opinion as to the methods to be followed to render them perfect cleansers of the skin.

Some of these regard the use of soap and water applied in the form of lather, with the hands, and afterwards thoroughly removed from the skin by copious affusions, rinsing or sluicing with water, or immersion in it, as the best method. This is probably the case when the skin is not materially dirty, or its pores or surface obstructed or loaded with the residual solid matter of the perspiration or its own

unctuous exudation and exuviae. To remove these completely and readily something more than simple friction with the smooth hand is generally required.

In such cases the use of a piece of flannel or serge, doubled and spread across the hand, or of a mitten or glove without divisions for the fingers, and of the same material, will be found most ready and effective. Friction with this, first with soap, and afterwards with water to rinse the soap off, will be found to cleanse the skin more thoroughly and quickly than any other method, and, by removing the worn-out portion of its surface, to impart to it a healthful glow and hue that is most refreshing and agreeable.

This effect will be increased by wiping and rubbing the surface thoroughly dry with a coarse and moderately rough, but not a stiff towel, instead of with the fine, smooth diapers, which are now so commonly employed. At the bath, the flesh-brush, usually provided there, will supersede the necessity of using the flannel.

Friction Invigorates the System.

It frequently happens that, owing to the locality or nature of one's residence, incessant occupation, deficient means or other circumstances, baths, or even entire personal ablution, cannot be indulged in or only so occasionally. In such cases recourse may be had to dry friction, which may be carried to any extent short of actual irritation. This will be found not only capable of cleansing the skin, but advantageous from exciting the cutaneous circulation and invigorating the whole system as well as the skin.

The instrument usually employed for the purpose is the flesh-brush, of which there are several varieties; but those which have the bristles set on a leather back are usually thought to be the most effective and the best. The flesh-glove or flesh-rubber of hair is a useful and very convenient modification of the common flesh-brush. Of these, that known as the "Indian kheesah" or "mitten" is superior to all others.

For the back, which cannot be easily operated on with the hand, a

flat band or belt of hair is employed. In the absence of flesh-brush, glove and belt, a coarse towel wound round the hand, or even a stocking with the hand thrust into it, may be employed.

Apart from mere cleanliness, of which it is a ready and important means, the benefit of friction, which consists of motion and heat, whether or not the same be raised by rubbing the body with a coarse cloth or with the flesh-brush has advantages inconceivable and scarcely credible, by which the obstruction of the pores and the cutaneous glandules are opened, their stagnating juices broken up, dissolved, and rendered fit to be carried off in perspiration, in the room of which new juice will succeed with new vigor to the body, and longevity, as that great naturalist, Lord Verulam, well observes, is in this way most certainly promoted.

Something Concerning Cosmetics.

The daily vigorous use of the flesh-brush, or the flesh-glove, for those parts of the body covered with the clothing, independent of theraputic action peculiar to itself, is probably the most healthful, effective and ready substitute for the entire bath that can be employed under many of the circumstances by which we are frequently surrounded. Occasional personal ablution, or the use of the sponge-bath, after it, greatly increases its good effects.

To promote the beauty of the skin, the assistance of art is frequently had recourse to, and this not always in the most judicious manner. All that is necessary for this purpose, under ordinary circumstances, may be said to consist in the restoration or promotion of the general health and vigor of the body, and the body, and the functions of the skin in particular, as previously indicated. Beyond this we should proceed with caution, and should exercise care, both in the adoption of general means, and the selection of special methods and applications to effect the objects desired.

The external applications that are commonly employed for improving the texture, clearness, and hue of the complexion, and of enhancing or preserving its varied charms are "cosmetics." Many of them,

when judiciously selected and employed, are perfectly safe in use ; but others are the reverse ; and it may be said of nearly all of them, except simple soap and water, that they are seldom required, and that their habitual use is seldom unobjectionable when the general health is good and the skin is in a perfectly healthy state.

Having noticed the general management of the skin in a state of health, a few remarks on it when diseased, or when its beauty is impaired by the effects of disease, medical treatment, accidents, or failing health, may prove interesting to the reader.

Beauty Impaired by Disease.

Diseases of the skin are very numerous and varied in their character, and all of them more or less impair its beauty, whilst most of them disfigure it, and not a few render it loathsome, and their victims unfit for the social circle and society. It is, however, chiefly of those of a mild character, and of the milder forms of others, in which medical aid is seldom sought, and of the prevention and removal of their ill effects on the personal appearance, that we shall chiefly refer to here.

The small black spots and marks frequently observed on the skin in hot weather, particularly on the face, generally arise from the accumulation of the indurated solid matter of the perspiration in its pores. When they assume the form of small pimples, and often when otherwise, they may be removed by strong pressure between the fingers, or between the nails of the opposite fingers, followed by the use of hot soap and water. The subsequent daily application of a weak solution of bichloride of mercury, or of sulphate of zinc, will completely remove the swelling, and generally prevent their re-formation.

Boils are well-known inflammatory tumors of a superficial and more or less temporary character, which usually terminate by supuration. They generally attack the healthy and robust during youth and early manhood, and seldom trouble persons who have reached the middle age. Though very annoying, and in their latter stages often painful, they are not dangerous.

Their treatment is very simple. When first they begin to form, they may sometimes be dispersed by friction with the fingers, lowering the diet, avoiding stimulating drinks, and by the use of mild aperients. When they exhibit persistency by gradual enlargement and increasing pain, it is advisable to promote their suppuration by the constant application of poultices of bread and linseed-meal ; or when this is inconvenient, by the use of warm, stimulating embrocations, or covering them with some stimulating plaster.

When the tumor is sufficiently mature, the matter should be evacuated by gentle pressure ; or, when the urgency of the case demands it, the head of the tumor may be carefully opened with a lancet, or the point of a very sharp penknife, or a needle. In either case the wound should be dressed, twice a day, with a little simple ointment spread on a piece of lint or a soft rag, and retained in its place by means of a bandage or a piece of adhesive plaster or strapping ; observing, at each renewal of the dressing, to press out any matter present in the tumor, and to thoroughly cleanse its surface by gently wiping or washing it.

Treatment for Bad Blood.

The pain and inflammation generally subside on the first discharge of the matter, and in a few days the wound heals. The diet may be full and liberal until the maturing of the tumor and the discharge of the matter, after which it should be reduced, and the bowels kept gently open for a few days by the use of some mild aperient.

When there is a predisposition to the formation of boils, excess in either eating or drinking should be particularly avoided, and care should be taken that the bowels act regularly once a day. Tonics, as bark, quinine, or steel, may be had recourse to with advantage ; as also the frequent use of the warm or tepid bath, or preferably, of sea-bathing, to keep the pores of the skin open.

Unnatural blueness of the skin—the “cyanosis” of pathologists—is said to arise from malformation of the heart, and then is irremediable. The blueness or slate color produced by the long-continued

administration of the salts of silver may, however, be generally lessened and occasionally removed by the long use of iodide of potassium, both internally and in the form of baths. Nitric acid employed in the same way is sometimes serviceable, as are also chlorinated baths and lotions.

Permanent discolorations of the skin, not of the preceding kind, are generally lessened and frequently removed by the daily and long-continued use of a glycerinated solution of bichloride of mercury. Others yield to a weak lotion of chloride of lime, employed in the same way. Those of a very obstinate character may be treated with occasional blisters. The marks of gunpowder, particularly when produced by "tattooing" or rubbing it into small punctures made in the skin, are generally very durable, and removed with great difficulty. They often continue for life.

To Remove Dandruff and Pimples.

Dandruff is an exfoliation of the skin, which differs from common scurfiness, chiefly in occurring in reddish patches. In its exaggerated forms, when the patches are irregular, and the cuticle is thrown off in large scales, accompanied with much irritation, it forms the "pityriasis" of pathologists, and the "branny tetter" of the vulgar. Its treatment consist in extreme cleanliness, the frequent use of warm soap and water, and attention to the diet.

Eruptions are too well known to require any lengthy description here. They are usually classified by writers on the subject into—animalcular eruptions, or those due to the presence of animalcula in the scarf-skin, which occasion much irritation, and of which the itch furnishes a well-marked example; papular, eruptions or dry pimples; pustular eruptions, or mattery pimples, of which some forms are popularly known as crusted tetter; scaly eruptions, or dry tetter; and vesicular eruptions, or watery pimples or vesicles.

The treatment of all of the above, except the first, in simple cases, where there is not much constitutional disarrangement, consists mainly in attention to the general principles of health—cleanliness, exercise,

food, ventilation, and clothing. Occasional doses of mild saline aperients should be taken, and warm or tepid bathing, preferably in sea-water, or ablution in warm soap and water, frequently had recourse to. Stimulants of all kinds should be avoided, and the red meats, ripe fruits, and the antiscorbutic vegetables, should form a considerable portion of the diet.

Things Worth Remembering.

Lemonade, made by squeezing the juice of a lemon into a half-pint tumblerful of water, and sweetening it with a little sugar, should be frequently and liberally taken, as one of the best beverages in such cases. To relieve the itching and irritation (except in the pustular, crusted, and vesicular varieties), brisk friction with a flesh-brush, or a flesh-glove, may be employed. The parts should also be wetted with an appropriate lotion, after each friction or bath, or the use of soap and water. These lotions may consist of half a teaspoonful of salt of tartar, or of the juice of a large lemon, or a wineglassful of strong vinegar, to about three-quarters of a pint of pure water, one or two ounces of glycerine being in each case added. In the absence of glycerine, decoction of bran, or buttermilk, may be used. In the pustular and crusted varieties, two or three ounces of rectified spirit, or five or six ounces of good rum may be added, a like quantity of the water being omitted.

When the habit of body is full and inflammatory, the diet should be lowered, and a depletive treatment adopted; when it is the reverse the diet should be liberal, and, if necessary, a coarse of tonic medicine, as bark, quinine, steel, should be taken. Cod-liver oil also proves highly beneficial in all cases.

Vigorous daily exercise, so as to produce natural perspiration, is an active curative agent in all skin diseases. Indeed, the best means of removing all the forms of obstinate eruptions and the predisposition to them, is to endeavor to restore the general health of the body in the manner which the existing circumstances may indicate.

In trivial cases, where the space affected is not extensive, the daily

application of a weak solution of bichloride of mercury, or of sulphate of zinc, to which a little glycerine has been added, will be found effective, both for the removal of all the ordinary eruptions and the prevention of their recurrence.

The small, hard, distinct pimples—"acne," or "acne simplex" of medical writers—that occur on the forehead, and occasionally on the temples and chin, generally yield to stimulating lotions consisting of equal parts of strong spirit or vinegar and water, or to weak lotions of sulphate of zinc, or of bichloride of mercury, assisted by occasional doses of cooling laxatives, as the salines, or a mixture of sulphur and cream of tartar. Let the treatment be thorough.

Freckles on a Delicate Skin.

Freckles, or the round or oval-shaped yellowish or brownish-yellow spots, resembling stains, common on the face and the backs of the hands of persons with a fair delicate skin who are much exposed to the direct rays of the sun in hot weather, are of little importance in themselves, and have nothing to do with the general health. Ladies who desire to remove them may have recourse to the frequent application of dilute spirit, or lemon-juice, or a lotion formed by adding acetic, hydrochloric, nitric, or sulphuric acid, or liquor of potassa, to water, until it is just strong enough to slightly prick the tongue. One part of good Jamaica rum to two parts of lemon-juice or weak vinegar, is a good form of lotion for the purpose. The effect of all these lotions is increased by the addition of a little glycerine.

The preceding are also occasionally called "common freckles," "summer-freckles" and "sun-freckles." In some cases they are very persistent, and resist all attempts to remove them while the exposure that produces them is continued. Their appearance may be prevented by greater use of the veil, parasol, or sunshade, or avoidance of exposure to the sun during the heat of the day.

Another variety, popularly known as cold freckles, occurs at all seasons of the year, and usually depends on disordered health or some disturbance of the natural functions of the skin. Here the

only external application that proves useful is the solution of bichloride of mercury and glycerine.

The itch—"psora" and "scabies" of medical authors, the "gale" of the French—already referred to, in its common form, is an eruption of minute vesicles, generally containing animalcula, and of which the principal seats are between the fingers, bend of the wrist, etc. It is accompanied by intense itching of the parts affected, which is only aggravated by scratching.

The usual treatment is with sulphur-ointment (simple or compound), well rubbed in once or twice a day, a spoonful (more or less) of flowers of sulphur, mixed with molasses or milk, being taken at the same time, night and morning. Where the external use of sulphur is objectionable, on account of its smell, a sulphuretted bath or lotion, or one of chloride of lime, may be used instead. In all cases extreme cleanliness, with the free use of soap and water, is a *sine qua non* in the treatment.

How Moles are Removed.

The small soft discolorations and excrescences of the skin, popularly called moles, may be removed by touching them every second or third day with strong acetic or nitric acid, or with lunar caustic. If covered with hair, they should be shaved first. When this fails, they may be easily and safely removed by a very simple surgical operation.

Extreme paleness of the skin, when not symptomatic of any primary disease, generally arises from debility, or from the languid circulation of the blood at the surface of the body; often, also, from insufficient or improper food, want of out-door exercise, and the like. The main treatment is evident. Warm baths, friction and stimulating lotions and cosmetics may be here employed, together with a course of some mild chalybeate (as the lactate, protophosphate, or ammonia-citrate of iron) and hypophosphite of soda.

Roughness and coarseness of the skin, when not depending on any particular disease, may be removed, or greatly lessened, by daily friction with mild unguents or oil, or by moistening the part, night and

morning, with a weak solution of bichloride of mercury containing a little glycerine.

Rashes and redness of the skin of a common character often arise from very trifling causes, among which indigestion, suppressed perspiration, irritation and the like are the most frequent. Nettle-rash, so called from the appearance and tingling sensations resembling those caused by the sting of nettles, in some habits of body is very apt to follow the use of indigestible and unwholesome food. It is usually of short duration and recurrent.

Exciting Causes Must be Avoided.

The treatment consists in the administration of mild saline aperients, and, in severe cases, of an emetic, particularly where the stomach is still loaded with indigestible matter. These should be followed by the copious use of lemonade made from the fresh-expressed juice. The patient should be lightly but warmly clothed during the attack, and exposure to cold or to draughts of cold air should be carefully avoided. The further treatment may be similar to that noticed under eruptions. To prevent the recurrence of the attack the objectionable articles of food, and any other known exciting causes, must be avoided.

Red rash, red blotch or fiery spot, a common consequence of disordered health, a sudden fit of dyspepsia, and, in females, of tight-lacing, and rose-rash, false measles or roseola, having commonly a similar origin to the preceding, for the most part require the same treatment.

Scurf—"furfur" or "furfura"—is a formation depending on the natural and healthy scaling off of the skin on every part of the body on which hair or down grows, but most extensive and observable on the scalp, on account of the abundance and darker color of the hair there. Scurfiness, or excessive scurfiness, is the result of morbid action, and may be treated by the frequent use of the flesh-brush or hair-brush, ablution with soap and water, and the use of mild, stimulating, astringent or cleansing lotions.

Scurvy—"scorbutus" of medical writers—is a disease which, even in its incipient and early stages, when its presence is often unsuspected, is most injurious to the skin and the complexion. It usually commences with unnatural sallowness, debility and low spirits. As it proceeds, the gums become sore, spongy and apt to bleed on the slightest pressure or friction; the teeth loosen, and the breath acquires a foetid odor; the legs swell, eruptions appear on different parts of the body, and at length the patient sinks under general emaciation, diarrhœa and hemorrhages.

Its chief cause is improper food, or rather the absence or insufficient supply of fresh meat and vegetables in the diet; to which cold, humidity, want of exercise and fresh air may be added as secondary ones. Hence its frequent fatal visitations formerly on ship-board, and its still occasional occurrence in ill-victualled ships during long voyages.

To Get Rid of "Pits."

The treatment mainly consists in adopting a liberal diet of fresh animal food and green vegetables, with ripe fruit and an ample allowance of lemonade made from the fresh-expressed juice. Effervescing draughts formed with bicarbonate of potash (not soda) are also very efficacious. In serious cases, tonics, as quinine and steel, should also be administered.

Small-pox—"variola" of the medical profession—is a malignant, contagious disease, which, happily for society, owing to the general practice of vaccination, is now comparatively seldom met with, although, at no very remote date, it was very common and fatal in this country. Its medical treatment, owing to the severity and danger of the disease, does not properly fall within the province of the present work. The prevention and removal of its ill effects on the personal appearance will, therefore, be alone spoken of here.

To prevent the permanent disfiguration of the skin by the pustules of small-pox, called "pitting" or "pock-marks," various plans are adopted, the chief and most certain of which have for their object the exclusion of the light and air. The application, on the third day, of a

mask formed of calico or thick muslin, freely covered with mercurial ointment, and having holes cut in it for the nostrils, eyes and mouth, will, in general, fully effect this object. It may be renewed every other day, or daily, if necessary; an operation which is best performed by candlelight; and its use should be continued until the symptoms of the disease disappear.

Another plan, highly spoken of, is to completely coat the entire face with gold-leaf. The application of gold-beater's skin, in a similar manner, is also an effective method, particularly if its slightly moistened surface be afterwards dusted over with some dark powder, as lamp-black, or black-lead, to render it opaque. The excess of powder that refuses to adhere, after dabbing it with a soft wad of cotton-wool, may be blown off with the breath or a pair of bellows. The puncture of the pustules as soon as they are mature has also been recommended to prevent "pitting;" a plan which may be adopted either by itself, or conjointly with one of those already mentioned.

Bodily Vigor Means Beauty.

These methods should be supported by keeping the patient comfortably cool, on a mattress, in a cool and well-ventilated apartment into which little light is admitted, antiseptic cooling drinks being at the same time freely taken.

The removal of "pock-marks," particularly old ones, is a matter of greater difficulty and time than their prevention. In common cases the continued use of a tepid glycerinated ioduretted lotion twice a day, or daily gentle friction with warm oils slightly ioduretted, will produce a manifest improvement, and ultimately wholly or in part remove them. The long-continued daily use of glycerinated solution of bichloride of mercury will also frequently do the same, and will invariably lessen them. Warm sea-water baths are likewise useful, and may be taken at the same time.

Wrinkles and looseness of the skin depend chiefly on the attenuation of the cutis, or true skin, and the reduction in the bulk of the underlying surfacial portions of the body. They cannot be regarded

as a disease of the skin, but are the result of long-continued bad health, anxiety and study, and of general emaciation and old age. Cleanliness, nutritious food, vigorous out-door exercise, agreeable occupation of the mind, and an equable and happy temper, retard their formation. Whatever tends to promote the general health, and to increase the bulk of the body, and particularly the deposition of fat in the cellular tissues, also tends to remove them, and to increase the smoothness and beauty of the skin.

The free and frequent use of warm soap and water, followed by the daily use of mild, stimulating, cosmetic lotions or fomentations, or friction with warm oil of a like character, and cod-liver oil internally, is all that art can do for the purpose.

Bruises, Burns, and Scalds.

Among injuries and disfigurements of the skin from wounds, medical treatment, accidents, and the like, may be mentioned: Abrasions or superficial injuries of the skin arising from the partial removal of the cuticle by friction, in most cases merely require to be protected from dirt and further injury, in any convenient manner. A piece of lint or soft rag, or of common sticking-plaster or strapping, or gold-beater's skin, is suitable for this purpose. When the surface is extensive or irritable, the lint may be advantageously spread with a little spermaceti-ointment or cold-cream before applying it.

In all cases, any adhering dirt, sand or gravel should be first removed by the affusion of warm or tepid water, or by means of a soft sponge and water. The marks left by them usually disappear in a short time of themselves. When this is not the case, they may be treated in the manner noticed under "scars."

The marks left by blisters, irritating ointments and lotions, etc., may also be treated like scars or the marks left by eruptions, as pointed out elsewhere.

Bruises or contusions, unless serious, do not require special attention, and usually disappear in a few days of themselves. The treatment, if any be adopted, may consist in fomenting the part with warm

water, or in friction with a little opodeldoc or soap-liniment, or harts-horn and oil. If there be much inflammation, the part may be freely bathed with a lotion of weak goulard-water, or with vinegar and water.

The treatment of burns and scalds essentially consists in protecting the part from the air and light. When the injury is superficial and slight, a little creosote may be applied, and the part then covered with a dressing of yellow basilicon (resin-cerate), or other simple ointment, or with a bandage rendered air-tight by means of thick solution of gum or starch, or white of egg. Gold-beater's skin, india-rubber court-plaster or sticking-plaster and collodion are admirably adapted for the purpose, the last being preferable whenever it is at hand.

You Should Know What to Do.

Collodion is a solution of gun-cotton (pyroxiline) in ether to which a small portion of alcohol has been added. It is only necessary to drop it on the wound or surface, previously wiped clean. It instantly spreads and solidifies into a solid, adhesive and highly protective skin or film. It is also highly useful in abrasions, cuts, raw wounds produced by violence, etc. When the part is very hot and painful, a large poultice of linseed-meal, to which a liberal portion of lard has been added, and on the surface of which a few drops of creosote have been spread, is a suitable application. It should not be changed sooner than the following day. Cooling lotions may also be applied to the surrounding parts. If the injury be a scald, the vesicle or bladder should be snipped with a pair of scissors, or freely pierced with a needle, and the water which it contains gently squeezed out, before applying any of the preceding dressings.

In all ordinary cases of a serious character, cooling laxatives should be administered, and the diet should be rather low until the inflammatory symptoms subside. The marks left by burns are always more or less permanent, but they may be often reduced or rendered less conspicuous by the treatment mentioned under scars, etc.

Cuts and incised wounds, as well as others of a like character, after

being freed from blood and dirt by means of a piece of lint or soft rag, or, better, when large, by the affusion of water, or with a soft sponge and water, should have their sides drawn close together, and retained in their places, by means of a piece, or small pieces, of strapping or adhesive plaster. This dressing should not be meddled with for a couple of days, by which time the wound will usually have begun to heal.

To Stop Local Bleeding.

When the wound is large, or when the nature of the part renders adhesive plaster insufficient, the usual plan is to sew it up, for which purpose the assistance of a surgeon must be sought. In more serious cases, to prevent the accession of inflammatory symptoms, the part should be kept constantly covered with a cold-water dressing. A little creosote dropped on the wound, previously freed from blood, or a small piece of lint or soft rag wet with this liquid and then bound over it, will generally stop local bleeding of this kind, when not extensive. A film of collodion is also very effective. Compound tincture of benzoin, quick-drying varnish, copperas-water, black ink, etc., are also popular styptics applied in the same way.

Excoriations, in popular language, are those cases of soreness produced by chafing under the arms, behind the ears, between the thigh and in the wrinkles and folds of the skin generally. They occur chiefly in infancy, and in stout persons with a delicate skin, who perspire excessively. Extreme cleanliness, and carefully wiping the parts dry after washing, with the subsequent use of a little violet powder or finely-powdered starch, or French chalk scraped or grated very fine, dusted over the parts once or twice a day, will generally remove them and prevent their recurrence.

Frost-bites should be treated by long-continued and patient friction with the hands or a piece of flannel, care being taken to avoid the fire, or even a heated apartment, until the healthy circulation of the parts be fully restored. Disfigurations left by them may be treated in the same way as those from burns, etc.

CHAPTER XXVIII.

THE HAIR—THE GLORY OF WOMAN.

AN Unrivalled Ornament—Hair of the Orientals—Premature Decay—Effect of Mental Emotions—Physical Structure—Hair-bulbs and Tubes—Chemical Constitution—Biography of a Hair—Necessity of General Health—Best Management—Use of Comb and Brush—Curl-papers—Crisping-tongs—Friction—Two Methods of Dressing—Objections to Artificial Styles—Cleansing the Scalp—Natural Arrangement of the Hair—Cutting and Clipping—A Dirty Habit—Luxuriant Growth—Curliness and Waviness—Fixing the Hair in Position.

THE hair is not only invaluable as a protective covering of the head, but it gives a finish and imparts unequalled grace to the features which it surrounds. Sculptors and painters have bestowed on its representation their highest skill and care, and its description and praises have been sung in the sweetest lays by the poets of all ages. Whether in flowing ringlets, chaste and simple bands, or graceful braids artistically disposed, it is equally charming, and clothes with fascination even the simplest forms of beauty :

"O wondrous, wondrous, is her hair !
A braided wreath of golden brown,
That drops on neck and temples bare."

If there be one point more than another in which the tastes of mankind appear to agree, it is that rich, luxuriant, flowing hair is not merely beautiful in itself, but an important—nay, an essential auxiliary to the highest development of the personal charms. Among all the refined nations of antiquity, as in all time since, the care, arrangement and decoration of the hair formed a prominent and generally the leading portion of their toilet.

The ancient Egyptians and Assyrians, and other Eastern nations, bestowed on it the most elaborate attention. The ancient Jews, like their modern descendants, were proverbial for the luxuriance and richness of their hair, and the care which they devoted to it. Glossy, flowing, black hair is represented to have been the "glory" of the

ancient Jewess, and in her person to have exhibited charms of the most imposing character; whilst the chasteness of its arrangement was only equalled by its almost magic beauty. Nor was this luxuriance, and this attention to the hair, confined to the gentler sex; for among the pagan Orientals the hair and the beard of the males were not less sedulously attended to. Among the males of Judah and Israel, long flowing ringlets appear to have been regarded as highly desirable and attractive.

The reputed beauty and the prodigious length and weight of the hair of Absalom, the son of David, as recorded in the sacred text, would be sufficient to startle the most enthusiastic modern dandy that cultivates the crinal ornament of his person. Solomon the wise, another son of David, conceived the beauty of the hair sufficiently dignified to express figuratively the graces of the church.

Hair of French Royalty.

Long, luxuriant hair was as much esteemed by many of the ancient European nations as by the Asiatics, although their attentions to it were of a ruder and less elaborate character. This was particularly the case with the northern nations, and with some of those of western Europe. The cultivation and regard of the hair was a passion in Gaul, and cutting and cropping it were employed as punishments.

The ancient royal family of France, as a particular mark of distinction and privilege of the king and the princes of the blood, had to wear "long hair artfully dressed and curled." The clerical tonsure is said to be of apostolic institution. At a later date Pope Anicetus forbade the clergy to wear long hair.

In modern times, the high estimation in which a beautiful head of hair is held, is probably as great as at any former period of the world's history. It is still regarded as an important ingredient in manly beauty, and as one of the very essentials of feminine loveliness and fascination. All persons are proud of it—all covet it—all admire it. Indeed, it may be truly said, that all persons, except the most indolent, vulgar, and degraded, are more or less sedulous in their endeavors, in

private, to improve their hair, and by tasteful arrangement to set it off to the best advantage.

The interest taken in the hair at the present day is shown by the enormous sums which are annually spent in western Europe, and in America, in articles of the toilet connected with it, and in hair-cosmetics. The hair appears to be the all-absorbing subject of the toilet in the minds of the fastidious Englishman and the polished Frenchman; so much so, indeed, as to often lead to negligence in the performance of many of its other important details—a sufficient proof of the personal interest with which the hair is regarded.

“Standing on End.”

In France the hair, even more than in England and America, is an especial object of attention. From the number of persons there connected with the toilet and cosmetic arts and dress, and particularly with the hair, an unsophisticated stranger might almost be led to suppose it to be a nation of barbers, friseurs, perfumers, tailors, milliners, etc.

The hair, though devoid of sensibility, and unsusceptible of expression under the influence of the will and the ordinary mental feelings, like the mobile portions of the face, and though it may be popularly regarded rather in the light of a parasitic growth than as an essential portion of the body, it is capable of being affected by the stronger emotions and passions, and even of aiding their expression in the features. Who is there that, at some period or other of his life, if only in childhood, in a moment of sudden terror or horror, has not experienced the sensation popularly described as “the hair standing on end?” or who is there that, at some time or other, has not witnessed the partial erection of the hair in children or females under like violent emotions, or seen the representation of it in sculptures or paintings?

Those passions, so aptly styled by Gray “the vultures of the mind,” frequently affect, with wonderful rapidity, the health of both the body and the mind, which wreck the hair soon sympathizes with and shares.

Instances are recorded in which violent grief, in a few weeks, has blanched the hair and anticipated the effects of age; and others, in which intense terror or horror has effected the same with even greater celerity, the change having occurred in a few days, or even in a few hours. Byron alludes to these facts in his "Prisoner of Chillon:"

My hair is gray, but not with years,
Nor came it white
In a single night,
As men's have done from sudden fears.

The hair, too, often indirectly becomes, in other ways, a rude exponent of perturbations of the mind. In moments of intense thought, hesitation, and perplexity, where does the hand unconsciously wander to, and the busy fingers find occupation? And in grief—woman's grief—what is so common?—

"A wreck of fair and glossy curls, and trailing
Raggedly down. Hast thou not seen hair so?
Thou mayst behold it in a woman wailing
In grief unutterable. In heavy woe
The fingers rush amid the banded hair,
Slipping the smooth and comely ringlets there,
As if confusion were affliction's order.
Read thou how Constance let her tresses fall
Around her throbbing temples, like a border,
At her poor Arthur's fate. And women all
Are Constances in this, that, with strong passion,
They crush the beauty which of old they cherished:
For sorrow hath no sympathy with fashion,
And outward grace decays when inward joy hath perished."

The formation and physical structure of the hair is very complicated and beautiful. On careful and minute inspection, it is seen to consist of elongated horny filaments, or tubes, which derive their elasticity and flexibility from their attenuated form. It is secreted and formed by certain minute conical-shaped glands, called the "hair-bulbs," and certain vessels called the "hair-capsules," both of which are lodged in the network of the cutis or true-skin. The rudimentary hairs are elaborated in the first in a semi-fluid state, and assume the form of a fluted pith, which is then invested by the capsules with a

semi-transparent horny sheath, giving a tubular and twofold structure to the hair.

As these rudimentary hairs develop themselves and harden, they push themselves gradually through certain pores or passages in the skin, called the "hair-tubes," or "hair-canals," and appear at the surface in the form of true hair, of which the texture becomes harder the further it extends from the skin. These tubes are lined with a thin layer of cuticle, which adheres to the base of the newly-formed hair next the bulb, forming the white sheath or ring observed round the base of a forcibly-plucked hair, which is popularly, but incorrectly, regarded as its root.

Why Hair is Straight or Curly.

They are also placed obliquely, and not perpendicularly, in the skin, by which the "set" or direction of the hairs on the surface of the head is determined. It is the form which these canals assume in their course outwards that gives some of its external characters to the hair. In the white races these tubes are generally straight, or only slightly curvilinear; the exceptions being in those who have wavy or curly hair, in whom these canals are more or less serpentine or spiral. In the African races they are rather intricate and contorted; and hence the crisp, grisly nature of the hair of the Negro.

It may be further remarked, that the sheath or tube that forms the visible portion of the hair is not cylindrical, as it appears to the unaided eye. Under a magnifier of small power it is seen to be jagged like the teeth of a saw, owing to it being formed, as it were, of a succession of inverted cones, so arranged as to fit into and receive each other, the serrations inclining inward from the root upward.

The hairs being thus formed and protruded through the skin, continue to grow until they acquire the length peculiar to the species of the individual, by incessant additions to their lower extremity within the skin; and they are continually repaired and kept in a state of vitality by the fluids that pervade the pith or centre portion. Nor is

this all. Nature has provided suitable glands around the base of the hairs to secrete oily matter, for the purpose of keeping the skin soft and easily permeable, and the hair itself soft, flexible, and glossy. In a state of perfect health this supply never fails, and is always sufficient for the purposes for which it is intended.

The chemical constitution of the hair was first made known by Mr. Hatchett, who showed it to consist chiefly of indurated albumen together with a little gelatine, or matter that yields it. Soft and very flexible hair is said to contain the most gelatine. Subsequently, Vauquelin discovered that hair contains two different kinds of oily matter—the one white and bland, common to all hair; the other, colored, and on which, in part, the particular color of the hair depends.

He also found small and variable quantities of mineral substances in hair. In light-colored hair he found magnesia; and in black and dark hair, iron and sulphur. It is the presence of these last that mainly gives to dark hair its color. Fur, wool, bristles, and spines, in their chemical nature, structure, and mode of formation, resemble hair; as also, to a very great extent, do the feathers of birds.

Affected by Age.

The biography or life-history of a hair resembles that of the microcosm of which it forms a part. Human hair is perennial; and unless its connection with the skin be severed by violence, the effects of disease, or the premature decay of the hair-bulbs from any of the numerous causes liable to affect them, it preserves much of its vigor and integrity to a late period of life. In most animals the hair is deciduous, and is cast annually; but not in man.

In infancy and early childhood the hair is generally pale, soft, thin, and very flexible. As the age increases, it gradually becomes more abundant, darker, coarser, and stiffer. In healthy youth and early maturity it reaches its prime, or state of greatest luxuriance and beauty; and thus it continues for some years, in a nearly stationary condition. Then it usually, gradually, very gradually, becomes thinner and weaker, and slowly loses its glossiness and some of its color.

Next, owing to the decreasing vigor of the circulation of the scalp, and its attenuation consequent on the progress of life, the hair commences falling off from the crown of the head, and soon afterward from the partings, which widen and become more conspicuous. The comb and brush may now be perceived to remove a greater number of weak hairs than heretofore, the place of which is not filled up by fresh ones, as formerly. This state may continue for some years, or even until a late period of life, the hair merely gradually getting weaker and sparser, and the crown more extensively bald; but usually more marked changes occur.

Gray Hair and Baldness.

About, or soon after the middle age, and sometimes even before it, gray hairs begin to appear. At first they are few in number, and far apart; but time soon multiplies them, and in a few years they become sufficiently numerous to affect the general hue of the hair. It may be here remarked, that when the hair rapidly gets gray before the middle age, the health of the party being at the same time good, it often does not otherwise deteriorate, but continues strong and vigorous for many years, and not infrequently until a late period of life.

The crown of the head, by this time, is probably wholly denuded of hair, and that on the other parts, where it still remains, is rapidly growing thinner and weaker, until little is left, and this only on the lower portion of the sides and back of the head. By the process of decay this is, ere long, blanched to a silvery white, and almost general baldness ensues—the usual accompaniment of old age.

The hair, however, does not always maintain its integrity, and slowly sink into a state of decay, by gradual changes in the manner just mentioned. On the contrary, a number of influences, avoidable and unavoidable, are constantly at work to deteriorate the one, and to hasten the others.

Among these may be mentioned uncleanness, mismanagement, the use of improper cosmetics, impaired health, disease, anxiety, watchfulness, irregular habits, intemperance, excessive indulgence of

the passions, exposure to the weather, and to the vicissitudes and extremes of climate, want of fresh air and exercise, keeping the head unhealthily hot and close, excessive or suppressed respiration, undue pressure, accidents, and the like, from one or more of which the cases of premature grayness and baldness, now so common, in general, arise. Indeed, it may be observed, that whatever proves injurious to the skin also proves injurious to the hair-bulbs imbedded in it, and consequently to the hair itself.

It may be laid down as a law, to which there are no exceptions, that the vigor, luxuriance, and beauty of the hair uniformly correspond to the state of health of the scalp from which it grows. Whilst the scalp is soft and thick, and the blood circulates with healthy vigor through its vessels, as is the case in youth and the early years of maturity, the hair-glands and capsules have ample space to exist and to work in, and ample materials in the shape of healthy arterial blood, out of which to elaborate their secretions. It is during this state that the hair reaches its highest degree of luxuriance and beauty; and it maintains these as long as the health and vigor of the scalp continue.

Management of the Hair.

As soon as the vigor of the circulation in the scalp begins to decline, whether from age, disease, or other causes, it suffers gradual attenuation. The functions of the hair-bulbs are thus more or less impeded, and as the attenuation proceeds, they are ultimately arrested altogether. The former produces weak, thin hair; the last, baldness. The smoothness, thinness, and partial transparency of the bald scalp of the aged has probably been observed by the reader.

The management of the hair, under the ordinary conditions of life and health, like that of the skin, is extremely simple, and should be either based on principles derived from the physiological facts already presented to the reader, or of a nature that will not interfere with the healthy functions of the hair-producing organs.

The chief of these, and, indeed, the essential ones, involve the necessity of keeping both the hair and the skin of the head perfectly

clean, and the former arranged in the direction in which it naturally lies, subject only to such little deviations as may be necessary to adapt it to the position in which it is usually worn; and this arrangement and position should be constantly followed on each occasion of dressing it.

To proceed to details, let us commence the subject with the duties of the toilet on rising in the morning. The personal ablutions having been performed, the hair will probably next engage the attention. If the immediate object, before leaving our chamber, or appearing at the breakfast-table, be merely to restore it from the disorder, into which it has got during the night—its more careful treatment and arrangement being deferred to a later period of the day—a slight use of the comb and brush will probably be found sufficient for the purpose.

Vigorous Use of the Brush.

If, however, this early toilet be the principal one, or the only complete one of the day—as it usually is with the majority of mankind—something more will be necessary. The question then arises, “How should we proceed to effect the object in view in the most satisfactory manner?” This may be answered in the following way: one or other of the two methods mentioned being adopted, each of which has advantages peculiar to itself, and, in appropriate cases and circumstances, is thus preferable to the other.

The hair, after a preliminary application of the coarser end of the dressing-comb, should be gently and assiduously brushed straight, or downwards in all directions round the head, until it be rendered quite smooth and apparently free from scurf, the brush being used in the manner hereafter explained. The motion of the hand may now be gradually changed until it assumes a direction upward and across the head, or one contrary to that in which the brush was previously used. This direction of the brush should be continued for a short time. It has the advantage of not exerting any strain on the hair of the crown and of the partings, and of removing all the scurf that has escaped the first brushing.

A similar gradual change in the motion of the hand to the direction in which the brush was first used, will restore the hair to its former position, and again smoothly and equally distribute it around the head from the crown downwards. Now is the time to apply oil or pomade, if any be used ; but this will be unnecessary if the scalp be thoroughly healthy and the hair luxuriant, as in this case the natural supply of oily matter, secreted by the oil-glands at its base, will be amply sufficient to keep it soft and glossy.

Pomade and Curling-tongs.

Presuming this supply to be deficient, or that, for other reasons, the party desires to use some oil or grease, he had better proceed as follows : having placed a little of the pomade or oil in the palm of the left hand, he should spread it equally over the inner surface of the two hands by rubbing them together. The hands being now applied to the hair, the oily matter on them may be equally diffused over its surface by wiping them on it, and by gentle friction ; after which its further equal distribution may be effected by the hair-brush. Two or three, or, at the most, four drops of oil, or a corresponding quantity of pomatum, according to the abundance of the hair, is amply sufficient for the purpose, when either of these are used daily ; and this quantity cannot be exceeded without inconvenience in regard to cleanliness, and without proving more or less injurious to the healthy scalp.

If curling-tongs or crimping-irons (objectionable things, by the bye) be used by the party, this will be the proper time for doing so. The hair may now be parted and adjusted with the comb (the coarser end being first used), then again well brushed to give it smoothness and set, and lastly receive any final adjustment to bring it into the usual position and style adopted by the wearer. In the case of long hair in curls or ringlets, or in any other state which it may be undesirable to displace or disarrange by the inverted motion of the brush, the portion of the hair so circumstanced may be firmly grasped in the left hand, and protected by it, whilst the brush is applied with the right,

by which its inversion and disarrangement will be prevented. If curl-papers or hair-crimpers be employed, it will, perhaps, be better to give the hair a thorough brushing in the way described before using them. Natural curliness or waviness of the hair is not affected by brushing, but rather increased by it. Nor does washing or wetting the hair destroy it. It is only necessary to subsequently place the locks loosely in a favorable position, with the fingers or comb, for them to resume either form immediately.

Artificial Styles.

The oftener the comb and brush are subsequently used in the day, the better it will be for the luxuriance, smoothness, and set of the hair. This mode of treating the hair is the one that should be preferred when it is desired that it should present an easy, flowing appearance, and be gracefully affected by the motions of the head and body.

The other method referred to is equally simple, and of very general application, and it is particularly adapted to the use of ladies and others who wear their hair in artificial styles, and in positions which it cannot easily be made to assume and retain by the common mode of dressing it.

Let us start from the point in the former description. The hair-brush having been freed from loose hair with the comb, and from scurf, by passing it smartly two or three times across the side of the extended hand—or, what is better, a fresh clean brush, kept for the purpose, being taken—it should be slightly dipped into water, or into rosemary-water or rosemary-tea, or any other simple liquid, and, the excess of water having been shaken out of it, applied to the hair, which should be brushed with it, until the latter is slightly moistened all over. In this state the hair should be parted and adjusted with the comb in the usual position or style of dressing it. A small piece of soft flannel that has been dipped in water or any other simple liquid, and then squeezed out, or the moistened brush, if now passed over its surface, will impart further smoothness and

gloss to it, if it be thought desirable; after which it may be finally re-adjusted with the comb if necessary. In a few minutes it will become dry.

The hair may be thus dressed in any style but curls or ringlets, and put into any position, however artificial, and which it will retain during the day as perfectly as if it were fixed with bandoline, unless it be disturbed or ruffled by actual violence. Should this happen, the moistened flannel or brush will again restore it. Or the hair may be treated by the previous method, at will, provided its set and adjustment be not interfered with. The latter should only be done when it is again washed or moistened.

Injurious Methods of Dressing.

Such are the outlines of two modes of dressing the hair which recommend themselves, not merely on account of their simplicity and effectiveness, but also from their being compatible with the healthy functions of the scalp, and, indeed, promotive of them. Their minor details may be varied to suit individual tastes and cases. The elaborate and highly artificial styles of dressing and adjusting ladies' hair, often in the most unnatural positions, with pins, combs, pads, etc.—all more or less injurious—do not fall within the range of the present work. Their adoption depends on personal taste, and must be left to the skill and experience of the hair-dresser.

Besides this daily attention to the hair, something else is necessary to ensure its cleanliness and beauty, and the perfect health of the skin of the head from which it springs. For this purpose the head should be occasionally well washed with soap and water, an abundance of water being used, and great care being subsequently taken to thoroughly rinse out the whole of the soap with the same water in which the head has been washed. The water may be either tepid or cold, according to the feelings or habit of the person; and if the head or hair be very scurfy or dirty, or hard water be used, a few grains of soda (not potash or pearlash) may be advantageously added to the water. This will increase its deterative qualities.

After the hair has been washed, which should be done quickly, though thoroughly, it should be freed as much as possible from the water by pressure with the hands, and then wiped with a soft thick towel, which should be done with care, to avoid entangling it. After laying it straight, first with the coarse end of the dressing-comb and then with the finer portion, it may be finally dressed and adjusted by either of the methods previously noticed.

In ordinary cases this act of cleanliness should be performed once in every week ; but if the head be much exposed to dust and dirt, or is very scurfy, or the party perspires very freely, it should be performed semi-weekly, or even oftener.

Thorough Washing of the Scalp.

The extreme length of ladies' hair will sometimes render the process of washing it very troublesome and inconvenient ; in such cases the patient and assiduous use of a clean, good hair-brush, followed by washing the partings and the crown of the head with soap and water, may be substituted.

The occasional washing of the head is absolutely necessary to preserve the health of the scalp, and the luxuriance and beauty of the hair, when much oil, pomatum, or other greasy substance is used in dressing it.

Something may now be said on the adjustment or arrangement of the hair adopted in dressing it. It has been already mentioned that this should be, as far as possible, in conformity with the natural set of the hair, and that any marked deviations from it are injurious. In the arrangement of the hairs on the surface of the body, it might be inferred that little existed to excite the attention ; but this is not the fact, if we are to judge by the careful investigations to which the subject has given rise.

From these we learn that the set of the hair, from the root to the point, is governed by a law as precise as that which regulates any of the other secondary vital functions. Thus, on the head, the hair radiates from a single point—the crown—to every part of the circum-

ference, making a gentle sweep behind, towards the left, and in front, to the right. The direction of this sweep is naturally indicated on the heads of children, and is that in which the hair is turned.

The same occurs on the face, and on other parts of the body. It is evident, therefore, that in making our toilet this natural arrangement of the hair should be interfered with as little as possible. Combing it, banding it, or braiding it, in an opposite direction to that which it naturally assumes, cannot prove otherwise than prejudicial to its healthy growth and beauty, and if long persevered in, particularly in conjunction with any strain on the roots, leads to its premature and often rapid decay, thereby increasing the look of age.

Artistic Skill in Cutting.

The cutting of the hair is another point connected with its management which is generally very little understood; yet there is not merely artistic skill to do this becomingly and beneficially, but also the application of principles founded on a knowledge of the growth and structure of the hair. As a rule, hair-cutters and hair-dressers are ignorant of these principles, and conduct their operations in a very careless way, immediate effect in reference to the personal appearance being the only object which they aim at.

Thus, according to the common practice, the strong luxuriant hairs of the lower portions of the head get unduly shortened, whilst the weaker, and probably the decaying hairs of the crown and around the partings, are left of extreme length, and often not cropped at all. Now, if there be anything serviceable in strengthening weak and decaying hairs, it is frequent cutting, and being kept moderately short. But such hairs grow feebly, and are of inferior length to their vigorous neighbors, which thus, in general, overtop and conceal them, and shield them from the scissors of the hair-cutter, who, indeed, neither thinks of them, nor takes the trouble of looking for them.

But it is on attention to these weak and impoverished hairs, that the whole art of beneficial hair-cutting depends. To do this, some

trouble, and more time and skill, are required than are usually devoted to the operation; and for which, of course, those who benefit by them must expect to pay.

Besides the mismanagement or improper treatment of the hair, by arranging it in unnatural positions, subjecting it to strains, and the head to pressure, and the like, already referred to, two or three other objectionable practices may be mentioned. Among these the principal, and the most general, is that of deluging the hair with oily or greasy substances. This is not only unnatural and dirty, but evinces an amount of either bad taste and vulgarity, or of laziness and slovenliness in the duties of the toilet, which is actually discreditable.

The Head Turned into a Dust-trap.

Look at the hair of any person who indulges in this dirty habit! What feelings does the sight occasion? Certainly none of an agreeable kind, or that are complimentary to the party gazed on. Look at his or her hat or bonnet, the collar of his coat, his nightcap, the pillow on which he rests his head, or anything else that his head touches. Do they not strike us with disgust? It has been truly said that "heads of such persons form excellent dust-traps."

Luxuriant hair growing on a healthy scalp needs no such extrinsic additions to give it gloss and set; thorough cleanliness, and the frequent and judicious use of the comb and hair-brush, are all that is necessary for the purpose; and even when the hair is ill supplied with the natural oily secretion at its base—a defect that generally arises from the long-continued use of oil or grease—a small, very small quantity of either of these articles will be found amply sufficient, provided it be properly diffused over and through the hair with the brush.

To improve the growth and luxuriance of the hair, when languid or defective, the only natural and perfectly safe method that can be adopted is to promote the healthy action of the skin of the scalp by increasing the vigor of the circulation of the blood through its minute vessels. For this purpose nothing is so simple and effective as gentle

excitation of the skin by frequent continued friction with the hair-brush, which has the convenience of ease of application and inexpensiveness.

The same object may be further promoted by the application of any simple cosmetic, wash, or other preparation, that will gently excite and stimulate the skin, or exercise a tonic action on it, without clogging its pores. Strong rosemary-water or rosemary-tea, and a weak solution of the essential oil of either rosemary or garden-thyme, are popular articles of this kind. They may be rendered more stimulating by the addition of a little ammonia, or a little spirit, or both of them. The skin of the head should be moistened with them on each occasion of dressing the hair, and their diffusion and action promoted by the use of a clean hair-brush. Aromatized water, to which a very little tincture or vinegar of cantharides (preferably the former) has been added, may also be used in the same way, and is in high repute for the purpose.

Good Applications.

When the skin is pale, lax, and wrinkled, astringent washes may be used. Strong black tea is a convenient and excellent application of this kind. When the skin and hair are dry, and the latter also stiff and untractable, a little glycerine is an appropriate addition to each of the preceding washes or lotions. The occasional use of a little bland oil strongly scented with oil of rosemary or of origanum, or with both of them, or with oil of mace, or very slightly tinctured with cantharides, is also generally very serviceable when there is poorness and dryness of the hair.

When the hair is unnaturally greasy and lax, a defect that seldom occurs, the use of the astringent washes just referred to, or of a little simple oil slightly scented with the essential oil of bitter almonds, will tend to remove or to lessen it.

All the articles named above promote the glossiness and waviness of the hair, and are also among the simplest, safest, and best applications that can be employed when the hair is weak and begins to fall off

To impart some degree of curliness or waviness to the hair when it is naturally straight, and to render it more retentive of the curl imparted to it by papers, or by other modes of dressing it, various methods are often adopted, and different cosmetics employed. The first object appears to be promoted by keeping the hair, for a time, in a state intermediate between perfect dryness and humidity, from which different parts of its structure being unequally affected, in this respect, will acquire different degrees of relaxation and rigidity, and thus have a tendency to assume a wavy or slightly curly form, provided the hair be left loose enough to allow it.

Old-fashioned Soap and Water.

For this purpose nothing is better than washing the hair with soap and water to which a few grains of salt of tartar (carbonate of potash) have been added; or it may be slightly moistened with any of the hair-washes just mentioned, in each half-pint of which a few grains (say 10 to 12) of the carbonate, or a teaspoonful of glycerine, has been dissolved. The moistened hair, after the application of the brush, should be finally loosely adjusted, as desired, with the dressing-comb. The effect occurs as the hair dries. When oils are preferred to hair-washes, those strongly scented with oil of rosemary, to which a few drops of oil of thyme or origanum may be added, appear to be the most useful.

A crisped, or a kind of wavy corrugated appearance, of some permanency, is sometimes given to living human hair by a modification of the process applied by the pelt-mongers and felt-manufacturers to certain furs, and called "*sécretage*" by the French. The hair is moistened for rather more than one-half its length with the *sécretage* liquid, care being taken that neither the liquid, nor the hair, until it has been subsequently washed, touches the skin. The operation is conducted before a fire, or in a current of warm air, so that the hair may dry as quickly as possible. The moistened hair is loosely adjusted into the desired positions, or into one favorable for its contraction, or, when partly dry, it is "put up" in greased curl-papers.

In a few hours, or sooner, the hair is washed with tepid water (without soap), dried, and slightly oiled. On being now gently combed and brushed, it generally shrinks up into small crisped or wavy locks ; and it will generally retain this property for two or three weeks, or even much longer. This process is highly objectionable, as, owing to the corrosive nature of the acid-liquid employed in it, it cannot be otherwise than injurious to the hair, and, as a consequence, must hasten its decay. It should, therefore, be avoided by every one ; and it is only noticed here, that its true character may be known.

To cause the hair to retain the position given to it in dressing it, various methods and cosmetics are commonly employed. When the arrangement is a natural one, and the hair healthy and tractable, the free use of the hair-brush will usually be sufficient for the purpose. When this is insufficient, the application of a few drops of oil, or, better still, moistening the hair with a little simple water, will effect the object satisfactorily.



CHAPTER XXIX.

RESTORATION OF THE HAIR.

Early Decay—Cold Water and Friction—Stimulating Applications—Restoring the Health of the Scalp—Baldness—The Hair Affected by Old Age—Other Causes—Thick Hats—Frequent, Close Cutting—Spanish Flies or Cantharides—Oils and Pomades—Electricity—Diet and Regular Habits—Tonics—Gray Hairs, and How to Treat Them—Morbid Dryness of the Hair—Use of Glycerine—Matting and Felting—Excessive Scurfiness—Rosemary and Thyme—Caution Against Quack Remedies—How Superfluous Hairs are Destroyed—Cleansing the Partings—Borax and Ammonia.

THE hair is subject to various deviations from the healthy standard, all of which, as already hinted, depend immediately on the state of the scalp from which it springs, and indirectly on various causes, of which the principal have been enumerated. Among them the following may claim a special notice :

The gradual impoverishment and decay of the hair—shown by its becoming finer and thinner, with greater or less loss of its brightness and color, and a larger quantity than usual being removed on each application of the comb and brush—whether premature or the result of advancing life, is most likely to be arrested, or retarded, by attention to the general health and habits, and careful avoidance of any article of head-dress or other matter which is known to be prejudicial to the hair.

The special treatment may consist in daily, or as frequently as possible, washing the head in cold water, gentle continued friction with the hair-brush, and the use of stimulating applications of a similar kind to those already noticed, but of rather greater strength, so as to produce a slight but sensible excitation of the skin of the scalp. Habitually disordered stomach, bowels, or nerves, and particularly biliousness and dyspepsia, frequently affect the hair in this way, and should be met by medical treatment, of which antacids, and tonics, as quinine and iron, should generally form a part.

Baldness, or destitution or loss of the hair, more especially of that of the crown and fore-part of the head, whether actual or impending, may next be noticed. Gray hair and baldness depending on old age are natural consequences of man's infirmity, and must be regarded as evidence of failing vigor, rather than in the light of a disease. Premature loss of hair may be produced by various causes, some of which have been already noticed. It is common after severe fevers, and after erysipelas and other serious inflammatory affections of the scalp; and it is frequently caused by external pressure, friction, or violence, want of the necessary exposure of the head to the air, and by such other local actions and conditions which, when long continued, interrupt the normal functions of the skin.

Debility and Loss of Hair.

Persons with a consumptive, scorbutic, scrofulous, or syphilitic taint, or of a general bad habit of body, are apt to lose their hair early. In these cases the loss probably arises from debility or paralysis of the vessels of the skin, and the consequent insufficient action and nutrition of the hair-bulbs. When it occurs in persons of or under the middle age, and apparently enjoying good health, it may be often traced to the pernicious practice of constantly wearing a hard non-ventilating hat, or to disordered stomach or liver, habitual smoking or hard drinking, irregular habits, late hours, or the like. Excessive anxiety or grief, and intense study and thoughtfulness, also tend to promote the early decay and loss of the hair.

The natural baldness of the aged, and frequently the premature baldness of earlier years, particularly in the studious and grief-worn, arises from the reduced energy of the circulation in the vessels of the scalp, and its consequent gradual attenuation, until it becomes too thin to afford sufficient space for the performance of the functions of the hair-bulbs and their associated organs, and too scantily supplied with blood for their due nutrition and support. In such cases it will be found that, owing to this attenuation, the scalp covers a larger portion of the skull than it previously did when vigorous; and that

its sides have somewhat receded from the top of the head, so that the roots of the remaining hairs descend lower on the forehead, temples, and the sides and back of the neck, than formerly.

This may be perceived by applying the open hand to the part, and then gently closing the fingers, when the scalp will be drawn into its original position, and will then appear loose and wrinkled over the upper portion of the head thus operated on ; and this in a manner very different to what occurs when the top of the head is covered, or well covered, with hair.

Since the introduction of waterproof clothing and thick, heavy hats, and the very general use of tobacco by the juvenile and scarcely mature portion of our population, early baldness has become so common that it now ceases to attract notice. These articles act as prejudicially on the hair as white bread and alum do on the teeth.

Approach of Baldness.

When the hair suffers a marked deterioration in quality, and ceases to grow, or grows languidly, and falls off in large quantities without being replaced by new growths, particularly if, at the same time, the usual healthy formation of scurf ceases, and the scalp looks pale, and exhibits a perceptible loss or diminution of its natural warmth, sensibility, softness, and plumpness, or, in other words, shows the usual signs of gradual attenuation, the approach of baldness may be suspected. It is now that remedial treatment has the best chance of success, and, if promptly and skilfully adopted, will generally arrest or greatly retard the progress of decay.

The treatment should be of the nature last above mentioned, but everything must be carried further, and every preparation employed, to be serviceable, should be considerably stronger than in the previous case. The frictions with the hair-brush should be more frequent and longer continued, and the daily ablutions in cold water more rigorously performed, or, what is better, replaced by a cold shower-bath taken on rising in the morning. When greasy preparations are used, it is advisable to wash the head with soap and water once a day.

During this treatment the hair should be kept rather short by frequent cutting; and if no manifest improvement occurs in the course of three or four weeks, the head, or at least the upper portion of it, may be shaved once or twice a week, and a wig, or a scalp, worn for a time. The effect of keeping the hair short, or closely cropped or shaved, is to stimulate the hair-bulbs, and to cause them to spend on the stumps, and on the formation of new hair, the whole of the hair-producing and nutritive matter which would otherwise, for the most part, be taken up by the length of hair removed.

Hence the remaining hair generally grows thicker, stiffer and stronger, the oftener the razor or the scissors are employed, and new growths arise; and this frequently when all other means of restoring the hair fail. Besides this, friction and medicaments can be more conveniently applied to the skin when naked than when covered with hair.

Warmth and Glow from Friction.

The strength of the external applications for daily use, whether wash or lotion, oil or pomade, should be sufficient to produce a pleasant glow of warmth, and slight, very slight, redness of the skin of the scalp, which should be promoted by gentle friction. Without this occurs, and continues with little abatement during the interval between their application, they do no good whatever. A proof of their favorable action is afforded by the scalp feeling warm to the hand when placed in contact with it.

When there is actual baldness, the same treatment should be followed; but if the portion of the skin implicated be extensive, friction with the hand, a piece of flannel, or a coarse towel, will be preferable to that with the hair-brush.

The favorite compounds for external use in baldness, and, perhaps, the most convenient and best, are such as own their stimulating quality to cantharides or Spanish flies, or to their active principle, cantharidine. This application of these drugs has received the sanction of the highest medical authorities, both in Europe and America, including even Dupuytren himself. The leading professional hair-

restorers now rely almost exclusively on cantharides, and all the more celebrated advertised nostrums for restoring the hair contain it as their active ingredient.

Oils and pomades very strongly impregnated with the essential oils of garden-thyme (*origanum*) and rosemary, and lotions or liniments containing ammonia with a like addition of these essential oils, probably come next in the frequency of their use as popular restoratives of the hair in actual and incipient baldness.

Electricity and Other Remedies.

Among active remedies for baldness, of less common use, may be mentioned mild streaming electricity, warm, stimulating fomentations and fumigations, cotton-oil, ioduretted and phosphuretted oils and lotions, etc.

It will be thus seen that the principle generally adopted, by both the professional man and the quack, in the treatment of loss of the hair and baldness, is essentially that of stimulation or excitation of the scalp. The celebrated Rev. John Wesley acted on it in his recommendation to rub the part morning and evening with a raw onion, until it becomes red, and then to apply a little honey. This is certainly good advice, as independent of the stimulus thus given to the skin and the circulation, the surface of the scalp is rendered more absorbent, and more sensitive to the action of medicaments.

As a mechanical aid in furtherance of other treatment, the use of a nightcap so contrived as to contract and lift, as it were, the relaxed scalp into its former dimensions and position, without injurious pressure on the head, may also be employed.

The reader may now again be cautioned against placing any reliance on external applications, unless he assists their action by due attention to diet, exercise, ventilation, regular habits, and such other matters as tend to promote the general health and vigor of the body. He should also assist the action of external remedies by the use of appropriate internal medicine. A course of tonic medicine, as quinine, or any of the milder chalybeates, preferably the first, or a combination of the

two, is often most serviceable in restoring the hair, and is compatible with any other treatment. A course of hypophosphite of soda is generally still more useful. The dose may be 5 to 10 grains, twice a day, soon after a meal, dissolved in water or milk. We are told that, during the operation of this remedy, the hair, even of consumptive patients, commonly grows again and improves in quality, and the beard reappears.

When Life has Gone Out of the Scalp.

The baldness of old age, and that arising from the destruction, or permanent injury, or disorganization of the hair-bulbs, admits of no cure, notwithstanding the daily assurances of advertising impostors to the contrary. This kind of baldness is indicated by the scalp not being at all warmed and reddened by gentle, continued friction, or by stimulating applications followed by friction. When this is observed, the case is hopeless, and it would be absolute folly to attempt to restore the hair.

Gray hairs, when occurring singly, and when few in number, or thinly scattered, may be removed with the tweezers, if their presence be objectionable; or they may be lifted from among the surrounding hair and moistened with a solution of nitrate of silver of sufficient strength to restore them to their former hue. The straggling gray hairs that frequently show themselves over the fore-part of the temples, and in the beard, are commonly and conveniently so treated.

Morbid dryness and intractability of the hair commonly arise from a defective action of the oil-glands. In some cases, this defective action is occasioned by excessive perspiration; in others, by the previous long and profuse use of crude or rancid oily or greasy substances; and, occasionally, by the action of strong soap or alkalies, which have been employed in washing the head, and not subsequently thoroughly removed by rinsing. The inconvenience may generally be obviated by the free use of the hair-brush, a stimulating wash containing a little glycerine, or a few drops of oil strongly scented with some stimulating aromatic, being also applied daily.

Matting or felting of the hair depends on its peculiar serrated structure, already explained. It frequently arises with long hair, when not daily combed, during sickness. The best mode of restoring the hair to order, in these cases, is to well oil it, and then to endeavor to free it from its state of combination by the patient use of the coarser end of the dressing-comb, beginning at the ends of the hairs. No force should be used, as the scalp is usually particularly liable to injury at such a time, and the hairs forcibly removed are frequently not replaced by fresh ones.

To avoid this matting or entanglement, ladies, immediately prior to their accouchment, frequently have their long hair formed into loose soft plaits or braids, to the extent of about one-half of its length. These braids may be easily removed and formed again at any time; or the hair may be combed and brushed without disturbing them.

Ammonia and Rosemary Water.

Scurfiness of the hair, when of an ordinary and trifling character, is not a disease, but results from want of cleanliness, and particularly from the non-use or insufficient use of the hair-brush. Scurf—"furfur," "furfura"—is a natural and healthy formation, and, within certain limits, is most abundantly produced when the hair grows most rapidly. It may be kept from accumulating, but it cannot be prevented. This will show how futile any attempt must be which shall have for its object to prevent the formation of scurf. It may be removed, and should be removed, every day, with the hair-brush; but prevention is impossible, inasmuch as it is opposed to a law of nature.

Excessive scurfiness is usually symptomatic of an unhealthy state of the skin of the scalp, and should be treated accordingly. The daily use of any mild, stimulating detergent or astringent wash will generally remove, or greatly lessen, the annoyance. For this purpose nothing is better than strongly-scented rosemary water to which some spirit and a little tincture of cantharides or a few drops of liquor of ammonia, or, both have been added. It should be applied with a

small, soft piece of sponge. Strong black tea is also a good wash for excessive scruffiness. If oil be preferred, it should be very strongly scented with oil of rosemary, thyme or mace.

Superfluous hairs may be removed either by the application of the tweezers or by depilatories. When the former are used, a few hairs only must be pulled out, one at a time, daily, to avoid excessive irritation. The latter, according to their mode of action, are distinguished into mechanical depilatories and chemical depilatories. To the first belong highly adhesive plasters, which, on their forcible removal, bring away the hairs with them. A mixture of equal parts of pitch and common resin, spread on leather, is of this class.

To Remove Superfluous Hairs.

The chemical depilatories usually consist of, or contain as their active ingredients, the caustic earths (lime or baryta) and alkalies, or their sulphurets. Their action is upon the hair-bulbs and hair-capsules, the vitality of which they either wholly or partially destroy at the same time that they dissolve off the hairs. Their successful use requires some skill and care, as, owing to their high causticity, they are liable to seriously affect the skin, and, sometimes, to produce inconvenient sores which permanently mark it.

Fortunately, there is no real occasion for employing such compounds, and "why they are ever used," is a question which vanity and fashion may be left to answer. Fortunately, also, the pain that accompanies their unskilful use and excessive action, acts as a sort of monitor to lead to their removal from the part before their worst effects are produced. The only safe way to use them is to apply them to merely a very small space at a time. The addition of starch is commonly made to render the paste more adhesive and manageable.

Almost all the fashionable advertised depilatories contain orpiment or yellow sulphuret of arsenic—a highly poisonous and dangerous substance—from a false idea that it increases the activity of the compound. All such nostrums should be avoided. Yet, strange as it may appear, orpiment is, and always has been, a favorite article in

these compounds. Lime or orpiment, and nearly always both of them, have, indeed, formed the leading ingredients in fashionable depilatories, both in ancient and modern times.

To clean the the partings of the hair, when dirty, nothing is better than soap and water applied with a small piece of flannel or sponge. The cosmetic washes sold for the purpose by the perfumers, under various high-sounding names, usually consist of water holding in solution a small quantity of salt of tartar, or of carbonate of ammonia, variously scented and colored. A little borax, dissolved in rosemary-water, forms a good wash of this kind. They should all be lastly removed from the partings with clean water and the sponge or towel.

The hair, or portions of it, particularly that of the face, is sometimes temporarily darkened by what may be called "painting" it. This is done by smearing a black or colored stick of hard pomatum or cosmetic over it until the desired color is given to it, and then slightly diffusing the color over the surface with the brush.

The practice is a dirty and unnatural one, as the color is partially removed by everything it touches, and the hair is converted by it into a trap to catch the dust. It is only to be tolerated when occasionally used by the fastidious to conceal a few straggling gray or faded hairs. Its use, like that of false moustaches and whiskers, once so common, is now chiefly confined to fashionable fops, and to the "swells" and "gents" of low life.

CHAPTER XXX.

BEAUTY OF FACE AND FEATURES.

Harmony and Right Proportion—The Forehead—Skin Eruptions—The Eyes—Most Expressive Feature—How to Treat the Eyes—Belladonna—Dimness of Age—Remedies for Discoloration—Effects of Dust and Dirt—Eyelashes and Eyebrows—The Nose—How to Mould and Beautify the Nose—Human Mouth and Lips—Chapped Lips—The Teeth—What Injures the Teeth—Tooth-powders and Use of the Brush—Use of Charcoal—The Ears—Wearing Ear-rings—Chin and Throat—Neck of Beauty.

THE beauty of the face depends chiefly on all its several features being pleasingly moulded and in "perfect keeping" with each other. Without this proportion between the individual features, the most delicate complexion, the brightest eyes, the softest cheeks, the finely-moulded mouth, and the ruddiest lips, may fail to charm, and, by contrast, may even disfigure where they should adorn. It is this excellence of proportion that constitutes one of the chief elements of personal beauty.

The possession of an elevated and prominent forehead is correctly regarded as one of the distinguishing features of the human race. Its erectness and extent are characteristic of reason and high intellectual powers, and its development is exactly proportionate to the intelligence of the species and of the individual.

A lofty, ample forehead is the attribute of the enlightened white race; a receding forehead, that of the Negro. Beyond a certain limit reason disappears, and idiocy commences. The absence of a true forehead is one of the characteristics of the brute creation. Its excellence is an important ingredient in personal beauty, and is absolutely necessary to the possession of a superior mind.

The toilet of the forehead is limited chiefly to the arrangement of the hair. The possessor of a beautiful forehead is seldom disposed to conceal any portion of it, or to modify its apparent form by such means. The practice of wearing the hair over portions of the fore-

head naturally bare is prejudicial to the health of the head, and to the vigor of the mind.

The contrary practice of throwing or fixing the hair in unnatural positions, backward from the forehead, is equally objectionable, for reasons already noticed. The defects of an ill-formed forehead may, in general, be rendered less apparent, and often wholly obscured, by an appropriate arrangement of the hair about it—a matter in which the taste of the individual, and the example of others, will be the best guides.

Beauty and Expression of the Eyes.

The eyes, of all the features, stand pre-eminent for their beauty and ever-varying powers of expression, and for being the organs of the most exalted, delicate and useful of the senses. It is they alone that “reveal the external forms of beauty to the mind, and enable it to perceive them, even at a distance, with the lightning speed of light. It is they alone that clothe the whole creation with the magic charms of color, and fix on every object the identity of figure.” It is the eyes alone, or chiefly, that reveal the emotions of the mind to others, and that clothe the features with the language of the soul. Melting with pity, or glowing with hope, or redolent with love, benevolence, desire or emulation, they impart to the countenance those vital fascinations which are the peculiar attributes of man.

The beauty and expression of the human eye have furnished themes for both poets and prose-writers in all ages. Sculptors and painters have bestowed their highest skill and most laborious efforts on its delineation, and anatomists and physiologists have investigated and described its wonderful structure and functions with a degree of zeal and eloquence perhaps greater than that devoted to any other organ.

Physiognomists tell us that the peculiar form, size and expression of the eyes, afford reliable indications of the disposition and mental character of the individual; whilst the phrenologist assumes, among other things connected with these organs and the parts adjacent to them, that prominent eyes indicate the presence of the organ of language, and that their possessor can always express his thoughts in words.



MODEL OF FEMALE BEAUTY.

A beautiful eye is one that is full, clear and brilliant, appropriate in color to the complexion, and, in form, to the features, and of which the connected parts—the eyelids, eyelashes and eyebrows, which, with it, in a general view of the subject, collectively form the external eye—are also beautiful, and in keeping with it. The eye has a language of its own. It speaks as

truly as the tongue does. It is the mirror of the soul, the proof of intelligence, the exhibitor of all the emotions that hold possession of the heart. Eyes have a power as great as spoken words. If there is joy within, or sorrow, or dismay, or any great emotion, the eye reveals it.

The management of the eyes, in connection with the toilet, consists chiefly in daily bathing or washing them with pure water, and



FINE TYPE OF WOMANLY GRACE.

the avoidance of friction or pressure, exposure to dust, irritating fumes, or vivid light, and fatiguing, straining or overtaking them. In washing them, and subsequently wiping them, the utmost delicacy should be exercised.

Strong soap should be particularly avoided, and only a soft napkin should be employed to wipe them. The use of a thick, stiff or coarse towel, for the last purpose, is very injurious to them, as it tends to flatten them, and hastens the arrival of the time when the assistance of spectacles becomes necessary. Rubbing the eyes with the fingers when drowsy, especially on awaking in the morning, has a like tendency, and is even more injurious.

Brilliancy of the Eyes.

To strengthen the eyes, to relieve them when fatigued or stiff or weak, irritable or inflamed, or swollen or congested, and to remove chronic ophthalmia, purulent discharges, etc., nothing is equal to frequently bathing them with water, at first tepid, but afterwards gradually lowered in temperature to absolute coldness.

To increase the beauty and expression of the eyes various means are occasionally had recourse to, nearly all of which are not merely highly objectionable but even dangerous. Thus, some fashionable ladies and actresses, to enhance the clearness and brilliancy of their eyes before appearing in public, are in the habit of exposing them to air slightly impregnated with the vapor of prussic acid. This is done by placing a single drop of the dilute acid at the bottom of an eye-cup or eye-glass, and then holding the cup or glass against the eye for a few seconds, with the head in an inclined position.

It has also been asserted, and we believe correctly, that certain ladies of the *demi-monde* rub a very small quantity of belladonna-ointment on the brow over each eye, or moisten the same part with a few drops of tincture of belladonna. This produces dilation of the pupil, and gives a peculiar fulness and an expression of languor to the eyes, which, by some, are regarded as exceedingly fascinating.

The use of these active medicinals, in this way, must be manifestly

injurious ; and when frequent, or long continued, or carried to excess, must necessarily result in impaired vision, if not in actual blindness.

How the Eyes are Injured.

The eyes, like the other organs, suffer changes and functional decay by age, improper treatment and excessive use. They are also injured by many of the violations of the natural laws that accompany modern civilization. Among the last, those that affect the nervous system are the most injurious to the eyes. Dissipation and the habitual use of narcotics—miscalled stimulants—are particularly so. Persons in health, with a brain and nervous system unclouded and undepressed by artificial habits and the use of narcotics, are those that usually possess the best sight, and that retain it unimpaired the longest.

The darkness or discoloration round the eyes, frequently observable in females, and which is sometimes permanent, but more frequently periodical, is either constitutional or depends on certain conditions of health, and occurs and disappears with them. In the fashionable world, the aid of the cosmetic art is not uncommonly called in to disguise these discolorations. A little French chalk or talc, in impalpable powder, is rubbed on the part and then gently "dusted off" with a camel-hair pencil or a tuft of badger's hair, or the excess is blown off with the breath. A little of the same powder that has been very slightly tinted with rouge or carmine is next applied, the excess being removed as before. The application of the pencil to clear the edges of the eyelashes, and of the corner of a soft napkin to "tone down" the outer margins of the parts treated, finishes the operation.

The effects of dust, dirt, acrid fumes, and other irritating substances on the eyes, may be met by freely bathing them in warm water, or by the use of the eye-douche. Gently raising the eyelid with the fingers, and holding it apart from the eye for a short time, will generally cause a copious discharge of tears, which will wash away the offending matter and relieve the irritation.

The beauty of the eyelashes consists chiefly in their length and silkiness. These qualities may be promoted by occasionally "topping"

them with a pair of sharp scissors. The practice is most effective when commenced in early childhood. The least possible portion of their extremities should be removed ; and the operation, to be neatly done, must be performed by a second person.

To Beautify the Eyebrows.

The eyebrows, unlike the eyelashes, should never be cut, or in any way subjected to the action of the scissors or razor. Their beauty consists in their being smooth, glossy, and well-defined, in having little breadth vertically, and in extending in a graceful, arched line over the eyes. Cutting them ultimately destroys these qualities, by causing them to grow coarse, stiff, and irregular.

After washing the face, the fingers or napkin should be passed over them to smooth them and to set the hairs in their places. This is all that is required. Some ladies, however, when making their toilet, pass the finger, very slightly moistened with oil or pomade, over the eyebrows, to darken them and give them gloss ; but the practice is not to be recommended. An occasional gray or prominent bristly hair in the eyebrows may be plucked out with the tweezers. It should never be cut off, as is the common practice.

The nose, though so necessary to the general make-up, seems to labor under the misfortune of being generally turned into ridicule whenever it forms the subject on the tapis. How far it deserves the slights and fun so frequently "poked" at it, we must leave the happy possessors of noses to form their own opinions. There have been, however, many excellent and philosophical writers who have deemed the human nose worthy of their serious consideration, and even of eulogy.

Sir Joshua Reynolds, the great painter, regards a well-formed nose as essential to personal beauty. He tells us, that "the line that forms the arch of the nose is beautiful when it is straight ;" and he further observes, "this, then, is the central form which is oftener met with than either the concave, convex, or any other irregular form which can be produced." Sir Charles Bell declares, among other matters,

that "the nostrils" which form so prominent a portion of the nose, "are features which have a powerful effect in expression. The breathing drawn through them, and their structure formed for alternate expansion and contraction, in correspondence with the motions of the chest, form an index to the condition of respiration when affected by emotion."

Among refined nations, and even in the fashionable world, the nose, may be regarded as one of the most fortunate of the features, since it almost uniformly escapes being interfered with at the toilet, further than simple cleanliness requires. This is precisely as it should be, for no interference with it after childhood, can advantageously modify its form or promote its beauty.

III Treatment of the Nose.

The nose, with its air-passages connected with it, always resents interference and mistreatment, whether there be frequent meddling with it with the fingers, blowing it frequently with ungracious violence, exciting it with stimulants, or choking it up with irritating powders. The ill effects of such treatment soon become perceptible, as may be frequently observed in irritable children and youth, and in inveterate snuff-takers. In the last, both the form of the nostrils and the tone of voice suffer. Heavy blows and pressure on the nose rapidly deform it and destroy its beauty.

In early childhood, owing to the soft nature of the cartilages that form the nostrils, the shape of the lower part of the nose may generally be slightly modified by gentle continual pressure. Thus, a nose disagreeably wide or spreading at its base, by being very gently and very slightly compressed for a few hours daily, may be reduced to more reasonable limits; but beyond this nothing should be attempted.

The disfigurement which the loss or distortion of the nose occasions must have been observed by the reader. The ambition of every one appears to be to possess a nose, even though it be not the nose of beauty. Individuals who have had the misfortune to lose this organ,

have been known to expend immense sums in trying to obtain the most effective and respectable substitute for it, in gutta-percha, or membrane, that the art of the mechanical surgeon can produce.



SYMMETRY OF FACE AND SHOULDERS.

Others have submitted to tedious and painful operations, and have endured prolonged confinement and sufferings for the purpose of the lost organ being replaced in veritable flesh and blood, borrowed from the forehead, the fore-arm, or lower limbs.

Hairs in the nose, when troublesome, may be removed with the tweezers. It should, however, be recollected that they are not idly placed there by nature ; one of their purposes being to act as a filter to the air we breathe. Persons who are much exposed to a dusty atmosphere, had, therefore, better not remove them.

Beautiful Mouth and Lips.

The beauty of the human mouth and lips, the delicacy of their formation and tints, their power of expression, which is only inferior to that of the eyes, and their elevated position as the media, with the palate, tongue, and teeth, by which we communicate our thoughts to others in an audible form, need scarcely be dilated on here. The poet tells us that—

“The lips of woman out of roses take
 The tints with which they ever stain themselves.
 They are the beautiful and lofty shelves
 Where rests the sweetness which the young hours make,
 And which the earnest boy, whom we call Love,
 Will often sip in sorrow or in play.
 Health when it comes doth ruddiness approve,
 But his strong foe soon flutters it away !
 Disease and health for a warm pair of lips,
 Like York and Lancaster, wage active strife ;
 One on his banner front the White rose keeps,
 And one the Red ; and thus with woman's life,
 Her lips are made a battle-field for those
 Who struggle for the color of a rose.”

A beautiful mouth is one that is moderately small, and has a well-defined and graceful outline ; and beautiful lips are such as are gracefully moulded, neither thick nor thin, nor compressed nor lax, and that are endowed with expression, and tinted with the hues of health.

The lips are very liable to suffer when exposed to cold and drying winds. The most common effects of such exposure are chaps or small fissures in them, and a species of erysipelatous eruption consisting of small clusters of minute vesicles, which soon become moist from the discharge of the watery humor which they contain.

Chapped lips most frequently occur in persons with pale, bluish, moist lips, and a languid circulation, who are much exposed to the wind in dry, cold weather, or who are continually moving from heated apartments to the external air. East and north-east winds are those that generally produce them. The occasional application of a little cold-cream, lip-salve, spermaceti-ointment, or any other mild unguent, will generally prevent them, and remove them when they have already formed. A still more elegant and effective preventive and remedy is glycerine diluted with about twice its weight of eau-de-rose, or glycerinated lip-salve or balsam.

The influence which the teeth are capable of exercising on the personal appearance is universally known and admitted. A beautiful set of teeth is one in which the teeth are compact and regular, and smooth, and pearly white, and in which the front ones, at least, are moderately small.

The teeth have formed especial objects of attention, in connection with the toilet and cosmetic arts, from almost the earliest ages of the world to the present time. History and tradition, and the researches of archæologists among the remains of the prehistoric periods of the nations of the East, show us that even dentistry may trace back its origin to a date not very long subsequent to the "confusion of tongues."

How to Care for the Teeth.

The preservation of the teeth is an object of the utmost importance; since, besides their immediate connection with the personal appearance, their integrity is highly subservient to health, owing to their use in preparing the food for the subsequent process of digestion. Unfortunately, the teeth are either wholly neglected, or very improperly treated, by the mass of mankind; and even those who are most attentive to their teeth, and who highly value their beauty, direct their efforts mainly to rendering the front teeth white, because these are seen when we speak, smile or eat. A thought respecting their permanent preservation scarcely arises until their decay commences and warns them of their approaching failure or loss. Yet the

preservation of the teeth and the permanent promotion of their beauty are nearly synonymous terms. The subject deserves the serious consideration of every one.

The rational management of the teeth consists essentially in thorough cleanliness and the avoidance, as much as possible, of the use of beverages, condiments, and articles of food generally that exert an injurious action on them or on the gums. Among the substances referred to, are all those of a sour or acid or corrosive nature, including acid piquant sauces, pickles, sour fruits and preserves, salads seasoned with vinegar, and the like; to which also must be added medicines containing acids or acid-salts, or any salt in which a strong acid is united to a weak base.

The Most Effective Cleaning.

When such articles are eaten or taken, it is advisable either to clean the teeth or to rinse the mouth with pure water as soon afterwards as possible. The use of hot food and liquids is also very prejudicial to the teeth and gums; and this more so in youth and early maturity than in after-life. Overtaxing the teeth, and frequently exerting them on hard, tough or gritty substances or in biting substances so thin or slender that their cutting edges are brought into immediate contact and act on each other, are other practices which rapidly tend to injure them and to wear them out.

Allowing particles of animal or vegetable food to remain in the interstices of the teeth, or in cracks or hollows in them, is particularly objectionable; as the first, from the heat of the mouth, in a short time generate a rancid acrimony, and the other an acidity, which not merely render the breath offensive, but rapidly corrode the teeth. Such particles should be removed by the toothpick after every meal.

The operation of cleaning the teeth, like all other operations of the toilet, should be carefully performed, and in as effective a manner as possible. The mode in which it is commonly done is worse than useless, and is not infrequently very injurious to the teeth and gums. To do it well and thoroughly, the action of the tooth-brush should not be

confined to the visible portion of the front teeth, but every portion of both the upper and under teeth, back and front, and on the inner as well as the outer sides, and the crowns, should receive attention. Without all this be done, the use of the brush can effect little in the way of thorough cleanliness, correction of the odor of the breath, and the preservation of the teeth.

Further, great care should be taken to avoid violence to the gums. If these bleed, or feel sore, real injury is done them by the operation, notwithstanding the assertions of certain interested dentists to the contrary. In such cases it will generally be found that the brush has been clumsily applied, or is of a coarse, inferior quality, or that the tooth-powder, or other cosmetic used with the brush, is of an acrid or gritty nature.

Powdered Castile soap forms a simple tooth-powder which, besides other excellent qualities, perhaps exceeds all other substances in its powers of destroying the minute beings just referred to, and removing the tartar resulting from their presence.

Recently-burnt charcoal, in very fine powder, is another popular and excellent tooth-powder which, without injuring the enamel, is sufficiently gritty to clean the teeth and remove the tartar from them, and possesses the advantage of also removing the offensive odor arising from rotten teeth, and from decomposing organic matter. The charcoal of the heavy, hard woods, as *lignum vitæ*, box-wood, oak, are the best; and these, as to quality, range in the order here given. Still more valuable, as a dentifrice, is areca-nut charcoal, which, besides possessing the properties of the other vegetable charcoals in an eminent degree, has invaluable ones peculiar to itself.

Ears and their Ornaments.

The ears are the only parts of the head and face that remain to be noticed. Moderately small and gracefully formed ears add greatly to the charms of the tout-ensemble. In some persons the back and upper lobes of the ears form a considerable angle with the sides of the face. This may often be observed in females, having been caused by

the practice of placing the hair behind the ears in childhood. The peculiarity is easily remedied, during early life, by wearing through the night a soft bandage round the head, so arranged as to restore the ears to their natural position.

The practice of wearing ear-rings is traceable to remote antiquity. In the Middle Ages they were commonly called "pendants." At the present day their use, in different forms, exists among almost all nations and tribes of men, both civilized and savage. In some countries their use is common in both sexes.

The operation of "piercing the ears" to fit them for holding ear-rings, is generally a harmless one; but it is not always so. In persons prone to erysipelas it has occasionally been known, when clumsily performed, to cause sufficient irritation to bring on this disease.

To be safe, the portion of the ring or pendant held in the ear should be of gold, and of not less than eighteen carats fine. When formed of base metal it is almost sure to "canker" the ear; and even when made of inferior alloys of gold it sometimes causes inconvenience.

The ear is subject to numerous affections, but a notice of them, being purely medical or surgical, does not come within the province of the present work. It should never be meddled with, as it is so delicate that its functions, as the organ of hearing, are easily impaired. The use of ear-drops, and of other like advertised nostrums, should be avoided as dangerous. In all affections of it, functional or local, the advice of a qualified surgeon or aurist should be early sought. Deafness commonly causes a peculiar cast of features, and a carriage of the head, which are far from pleasing.

The Neck of Beauty.

Of the neck and throat little may be said. The evils resulting from tight bandages and pressure on these parts have been already pointed out; and here it may be useful to call attention to the ill consequences that frequently arise from their too free exposure, or from their being insufficiently protected from draughts, cold, and rapid vicissitudes of the weather. The low dresses of fashionable life that generally replace,

at a later part of the day, the higher and warmer morning dress, which until then has been worn in safety and comfort, are perhaps the most certain traps ever invented by fashion to catch sore throats, bronchitis, influenza, and a whole host of breath-ailments, of which fatal lung diseases are the common result.

In early life, low frocks are more particularly dangerous, and are rendered still more objectionable from the habit which children commonly have of shuffling them off one of the shoulders, and thus leaving the upper portion of the chest exposed in a manner that even the most hardy often cannot long resist.

It should be recollected that the throat and neck, particularly the first, contain numerous important glands, and other organs, which are highly susceptible to cold and changes of temperarure; and that, at the bottom of the throat, lie the apexes of the lungs—those delicate organs, which, in these latitudes, are many times more susceptible to disease from exposure and climatic changes than all the other viscera put together.

The neck of beauty is that of the period which ranges from the early prime to the ripe maturity of woman, of which the most perfect conception is given us in the Greek sculptures—the Venus, the Diana, the Niobe, and many of the Naiads. In masculine beauty, the Apollo Belvedere, in this respect, furnishes a transcendent model to all time. Neither the elongated cylinder that forms the neck of the crane-family, nor the frustum of a cone which forms that of certain porcine bipeds, can possibly have the slightest pretensions to beauty

Of the shoulders, it may be observed that, in woman, those are the most beautiful which are neither wide nor meanly narrow, and which droop or flow, as it were, into the arms in a graceful undulating curve. In man, broad shoulders, if well proportioned, are a sign of strength. Stays or corsets, worn in youth and early maturity, tend to make the shoulders high and broad, and thus distort, instead of improve, the figure.

PART V.

POLITENESS; OR, WOMAN IN
SOCIETY.

CHAPTER XXXI.

TASTEFUL AND BECOMING DRESS.

Every Lady Should Pay Attention to Dress—Fitness—Subordinate to the Person—Suited to Different Seasons—Graceful Curves—Hints on Colors—Variety in Costume—Dressing the Hair—The Parasol—Bonnets—"Nut-brown Maids"—Use of Veils—Dress for the Neck—Sore Throats—Sudden Changes of Covering—Wearing Ornaments—Vulgarity of Too Much Jewelry.

WOMEN are sometimes charged with devoting too much attention to matters of dress. There is, perhaps, some foundation for the accusation, for these things should not certainly be made the principal business of their lives; but we would by no means counsel them to treat dress as a trifling or unimportant matter. The grand cause of regret is, not that they devote themselves zealously to it, but that their studies and labors in that direction are not guided by a better knowledge and more artistic tastes.

With all the time, attention, and labor bestowed upon the subject, comparatively few women, especially in this country, dress well, either in an esthetic or a hygienic point of view; and what is intended to heighten their charms, too often obscures, and, in the end, destroys them. A woman who has herself the reputation of dressing well, and who has had abundant opportunities of observing toilets of different nations, says: "The great majority of my sex understand the art of dress no further than that 'fine feathers make fine birds;' hence, they dress more or less in bad taste."

The fact is, dress is not studied as an art, and in the light of the fundamental principles of taste, as it should be, but is subjected to the arbitrary and senseless rules of fashion.

Fashion is an arch tyrant whom we would gladly overthrow, but she is securely enthroned beyond the reach of our blows. A direct attack would be useless. Our only hope is in gradually undermining her power by the diffusion of knowledge and the cultivation of popular tastes. To contribute to such an extent as our very limited space will permit, to these ends, we offer the following hints :

Rules for Dress.

Dress has primarily two functions—to clothe and to ornament ; but use and beauty, in this as in other cases, so far from requiring any sacrifice for combination, are found, each in the highest degree, where both are most fully obtained—the fittest or most comfortable dress being that which is most graceful or becoming. Fitness is the primary demand, and the dress that appears uncomfortable is untasteful.

“Dress is always to be considered as secondary to the person.” This is a fundamental maxim in the art of costume, but is often lost sight of, and dress made obtrusive at the expense of the individuality of the wearer. A man’s vest or cravat must not seem too important a part of him ; and a woman should not be wholly lost in her skirts. If you are not better and more beautiful than your clothes, you are, indeed, a man or a woman of straw.

Mrs. E. Oakes Smith very happily says : “The greatest compliment that can be paid to a woman is to forget her dress, or rather not to see it—as proving it to be so characteristic that we are not incommoded by observation, and are thus left to unalloyed companionship. We see, as it were, face to face, and not through whalebone and starch. The rose in her hair is a part of her womanhood, and the robe, in hue and shape, is so a part of her mold that we do not see it, but her. All is harmony, and she is the genius to which everything else has become subordinate.”

It follows from the principles already stated, that any costume, to fulfill properly either of its important functions, must possess fitness in forms, materials, and colors to the person of the wearer, and to the conditions of time, place, and occasion on which it is worn. The fact that fashion compels us constantly to violate this principle does not invalidate it. In treating of dress as an art, we must ignore fashion altogether. In our practice we must do what we can. It is but just, however, to fashion and its promoters, to admit that they are not responsible for all the incongruities with which we meet. They are often mainly due to bad taste and affectation.

"A Poorer Sort of Man."

The first application of the law of fitness gives us the distinction of sex in dress, and shows the absurdity of dressing men and women alike. The physiological reasons why every form of dress which is becoming on one sex may with propriety be rejected by the other, will suggest themselves to any one at all familiar with the human figure.

"Some," Mrs. Smith says, "have contended that there should be no difference in the dress of the sexes. I think that a moment's reflection will convince us that this is a mistaken taste. As a general rule, we are shorter than the other sex, and I am sure we do not wish to seem only a poorer sort of men."

There should be fitness to the individual, as well as to the sex. We instinctively know that the young and the old should not dress alike. Neither should the tall and the short, the pale and the rosy, the grave and the gay, the tranquil and the vivacious. Each variety of form, color, and character has its appropriate style.

"Woman," the erratic, but beautiful and witty Lola Montes said, "may take a lesson on dress from the garments which nature puts on at the various seasons of the year. In the spring of youth, when all is lovely and gay, the light and transparent robes of brilliant colors may appropriately adorn the limbs of beauty. Especially if the maid possess the airy form of Hebe, a light, flowing drapery is best suited

to display her charms. This simple garb leaves to beauty all her empire. No heavy ornaments should load the figure or distract the attention in its admiration of the lovely outlines. The young woman of graver mien should select her apparel with reference to her different style of beauty. Her robes should always be long and more ample than those of her gayer sister; and they should also be thicker in substance and of a more sober color."

"In form," another writer says, "simplicity and long, unbroken lines give dignity, while complicated and short lines express vivacity. Curves, particularly if long and sweeping, give grace, while straight lines and angles indicate power and strength. In color, unity of tint gives repose—if somber, gravity, but if light and clear, then a joyous serenity—variety of tint gives vivacity, and if contrasted, brilliancy."

Stripes and Flounces.

Tall women should not wear dresses with longitudinal stripes, as they will make them appear taller than they really are. Flounces and stripes running around the dress have an opposite effect, and should be avoided by short persons. Light colors are more suitable to small persons than to large ones, as they increase the apparent size. The colors worn should be determined by the complexion, and should harmonize with it and with each other. The following suggestions from Youmans' "Household Science" will be useful to our fair readers:

"Any colored objects, as bonnet trimmings or draperies, in the vicinity of the countenance, change its color; but clearly to trace that change we must know what the cast of complexion is. This varies infinitely, but we recognize two general sorts, light and dark, or blonde and brunette. In the blondes or fair-complexioned the color of the hair is a mixture of red, yellow, and brown, resulting in a pale orange-brown. The skin is lighter, containing little orange, but with variable tinges of light red.

"The blue eye of the blonde is complementary to the orange of the hair. In brunettes the hair is black, and the skin dark, or of an orange tint. The red of the brunette is deeper or less rosy than that

of the blonde. Now, the same colors affect these two styles of complexion very differently. A green setting in bonnet or dress throws its complement of red upon the face. If the complexion be pale and deficient in ruddy freshness, or admits of having its rose-tint a little heightened, the green will improve it, though it should be delicate in order to preserve harmony of tone.

"But green changes the orange hue of the brunette into a disagreeable brick-red. If any green at all be used, in such case it should be dark. For the orange complexion of brunette the best color is yellow. Its complementary, violet, neutralizes the yellow of the orange and leaves the red, thus increasing the freshness of the complexion. If the skin be more yellow than orange, the complementary violet falling upon it changes it to a dull, pallid white. Blue imparts its complementary orange, which improves the yellow hair of the blondes, and enriches white complexions and light flesh tints. Blue is, therefore, the standard color for a blonde, as yellow is for a brunette. But blue injures the brunette by deepening the orange, which was before too deep.

Complexion Must be Consulted.

"Violet yellows the skin, and is inadmissible except where its tone is so deep as to whiten the complexion by contrast. Rose-red, by throwing green upon the complexion, impairs its freshness. Red is objectionable, unless it be sufficiently dark to whiten the face by contrast of tone. Orange makes light complexions blue, yellow ones green, and whitens the brunette.

"White, if without luster, has a pleasant effect with light complexions ; but dark or bad complexions are made worse by its strong contrast. Fluted laces are not liable to this objection, for they reflect the light in such a way as to produce the same effect as gray. Black adjacent to the countenance makes it lighter."

Dress should accord with the wearer's pecuniary means, her social position, and the society in which she moves.

One's costume should be suited to the time, place and other cir

cumstances under which it is to be worn. You would not, of course, wear your summer clothes in winter, or your winter clothes in summer. For a similar reason you should have one dress for the parlor and another for the kitchen, one for in-doors and another for the street or a ramble in the country. Long flowing and even trailing skirts are beautiful and appropriate in the drawing-room, but in the muddy streets, dragging in the filth and embarrassing every movement of the wearer, or in the country, among the bushes and briers, they lose all their beauty and grace, because no longer fitting.

Fettered by Fashion.

No dress that hinders the movements of the body or prevents its symmetrical development can be either fitting or in any high sense beautiful, whatever fashion, which has no respect for physiology, may say to the contrary.

An application of the principles just laid down would give a pleasing variety in style and color in place of the uniformity which now so generally prevails. No two persons should dress precisely alike, unless two can be found between whom no point of difference, either in physical or mental character, can be discovered.

What is wanted is to get rid of the absurd tyranny of fashion, so that what is becoming to each person, whether man or woman, may be worn without social outlawry or discredit. Of the advent of such a state of things as this we have strong hopes. There is now certainly a tendency in the right direction among the more thoughtful and independent of both sexes.

An authority on this subject has the following hint, which we hope no fair reader of ours will feel constrained to take to herself:

"It is no uncommon thing for women to become slatternly after marriage. They say they have other things to attend to, and dress is habitually neglected—except, perhaps, on great occasions, when there is a display of finery and bad taste abroad, to be followed by greater negligence at home. Great respect is shown to what is called 'company,' but apart from this there is a sort of *cui bono* abandonment,

and the compliment which is paid to strangers is withheld from those who have the best right to claim, and are most likely to appreciate it. This is a fatal, but too common error. When a woman, with reference to the question of personal adornment, begins to say to herself, 'It is only my husband,' she must prepare herself for consequences which, perhaps, she may regret to the latest day of her life."

In dressing the hair there is room for the display of a good deal of taste and judgment; but every lady will be able, after a few experiments, to decide what mode renders her face most attractive.

Ornamental Dressing of the Hair.

Ringlets or frizzes hanging about the forehead suit almost every one. On the other hand, the fashion of putting the hair smoothly, and drawing it back on either side, is becoming to few; it has a look of vanity instead of simplicity: the face must do everything for it, which is asking too much, especially as hair in its pure state is the ornament intended for it by nature. Hair is to the human aspect what foliage is to the landscape.

Women are provided with a more dense and abundant covering of hair than men can boast of, and it is possible for that hair to be so arranged about the head as to discharge nearly all the functions of a perfect hat. There is, or was, for example, a fashion of "doing" the hair that consisted in forming it into several plaits, that were then lightly coiled round the head so as to evenly cover it over the greater part of its extent. By this means the head was provided with a natural cap, made of a material that of all others would appear to be the most suitable as a covering for it, that was light, easily penetrated by air, pervious to moisture, and not readily influenced by change of temperature.

In ancient Greece the hair appears to have been so worn as to render the head, under ordinary circumstances, independent of artificial protection. This was effected by keeping it moderately short, and by massing it more or less evenly over the head. The hair was thus kept loose, and the scalp free from unnecessary compression.

As one other example, may be noted the fashion of wearing the hair short, and of splitting it up into a thousand small curls that evenly covered the head with a light but efficient covering. In such a method the scalp is protected by means that find their most complete fulfilment in the woolly head of the Negro.

In the next place, women are much less exposed to the vagaries of climate than are men. They are not (or should not be) exposed to a scorching sun for many hours while engaged in some laborious work, nor, under ordinary circumstances, are they required to battle with wind and rain; their life is such that it is spent rather under shelter than in the open, and even their out-door amusements do not usually call for much intimate acquaintance with the "elements."

Protection Against Heat and Cold.

Lastly, the parasol must be regarded as a kind of hat. We would not for a moment advocate the use of this incumbrance. But its adoption is very general, and it may fairly be considered as affording a covering for the head. The thickness of the hair and the excellent blood supply of the scalp afford substantial protection against cold, but against solar heat the civilized female requires artificial aid.

The parasol is certainly not the best means of affording that assistance. It has to be supported over the head, and is one of the many little obstacles in the way of an easy and graceful carriage. That women can without detriment go with the head practically bare—if we exempt the umbrella and sunshade as headgear—was, we imagine, practically demonstrated some years ago, when the bonnet was reduced to such microscopic dimensions, that by no stretch of language could it be said to have covered the head.

Whatever artificial covering is adopted for the female head, it should at least have these qualifications: it should be light and pervious to air and moisture; it should maintain the head at all parts at an equable temperature; it should not constrict the scalp, and it should be competent to protect the eyes from the glare of the sun. Women carry too much rather than too little upon the head.

Considering the hair as a head covering, it is often most indiscreetly used. It is allowed to grow too long, and to oppress the head by its needless weight ; or it is massed into knobs and protuberances, that leave one part of the scalp almost bare and another part unduly covered up ; or false hair is indulged in, and collections of this material are located upon the scalp in spots indicated by fashion, with the result that undue pressure is brought to bear upon the skin, and the temperature of the head is disturbed and rendered unequal.

Hats and Bonnets.

With reference to bonnets, they are often rendered unduly heavy by superfluous ornament, even if not of much weight in themselves. Bonnets and hats, moreover, are frequently poised on one segment of the head only. They have been worn located at the back of the head, so as to leave a considerable portion of the vault quite bare ; and have, on the other hand, been worn so far forward as to approach the eyebrows. Bonnets should, if possible, protect the eyes from the glare of the sun. At present this protection is afforded by the parasol, which is tolerated because just now it is unfashionable to exhibit upon the cheeks the signs of health.

The edicts of fashion assert that the complexion must be "preserved ;" a sickly pallor is more to be desired than a ruddy skin, and there is some vulgarity surrounding the "nut-brown maid." So long, therefore, as the natural effects of sunlight and a freshening breeze upon the healthy cheek are vulgar, so long will parasols be a necessity. When, however, the popular taste will allow that there are beauties in health as well as in disease, the sunshade may be cast aside, the face may be freshened by sun and wind, and a bonnet may be worn so constructed as to shade the eyes from glare.

One word with regard to veils. They are worn, we are told, for many reasons. They keep the hair from being blown about ; they help to maintain a bonnet in its place ; and they serve to hide a coarse skin, and to modify the effect of a spotty complexion. It is for others to judge whether these objects are sufficiently weighty to

countenance an article of dress that must under any circumstances be uncomfortable. We do not for one moment believe the statements that have been advanced to the effect that veils cause short-sightedness, squinting, and blindness, although they must interfere a little with vision when worn.

When carried over the mouth they soon become saturated with moisture, and thereby cause all the air that is inhaled to be unduly charged with dampness. This can scarcely be other than a disadvantage. The veils thus moistened, moreover, may in cold weather lead to chapping of the skin and to cracked lips, and, owing to the poisonous dyes that the veils sometimes contain, may induce certain conspicuous eruptions of the face.

Danger from Changes of Clothing.

Perhaps the most common fault observed in the neck clothing of women consists in the frequent changes that are affected in the amount of material worn round the part at various times. At one period of the day the neck may be well covered up to the chin, while at another period (as, for example, when an evening dress is donned) it may be suddenly left absolutely bare. To keep the neck constantly well protected by clothing may not be an evil, nor may it be injurious to leave it constantly entirely bare, but it certainly is an evil at one time to protect the part elaborately, and at another to leave it free from all covering. Sudden fluctuations in the circulation and temperature of the skin are not well borne in any part of the body, and the neck forms no exception to the rule.

As to what may be the actual manifestations of this unwise practice it is, perhaps, difficult to speak with precision. We think it will, however, be allowed that women are more prone than men to sore throats, to colds, to mild attacks of laryngitis, associated with some loss of voice, and to swellings of the lymphatic glands in the neck. It may not be incorrect to assume that these evils are often to be traced to the uncertain covering of the female neck, and to the abrupt fluctuations of temperature to which that part is sometimes exposed.

Women, perhaps, indulge more frequently than men in the practice of wearing tight collars and bands around the neck. This practice appears to be less common since the admiration for a "swan-like neck" has waned, and since it has been demonstrated that such a neck is generally the outcome of an undesirable degree of emaciation.

The Wearing of Ornaments.

That beauty

"Needs not the foreign aid of ornament,
But is when unadorned adorned the most,"

is a trite observation ; but with a little qualification it is worthy of general acceptance. Aside from the dress itself, ornaments should be very sparingly used—at any rate, the danger lies in overloading one's self, and not in using too few. A young girl, and especially one of a light and airy style of beauty, should never wear gems. A simple flower in her hair or on her bosom is all that good taste will permit.

When jewels or other ornaments are worn, they should be placed where you desire the eye of the spectator to rest, leaving the parts to which you do not want attention called as plain and negative as possible. There is no surer sign of vulgarity than a profusion of heavy jewelry carried about upon the person, suggestive of a Mexican mule loaded down with gold.

CHAPTER XXXII.

DEPORTMENT AND MANNERS.

Importance of Good Behavior—Beauty Marred by Lack of Grace—Carriage of the Body Reveals Character—Absence of Affectation—Self-possession—A Graceful Walk—The Soldier's Drill—Avoiding Offensive Habits—Disorderly Costume—Coarse Eating and Drinking—Disagreeable Noises—Love to Others—Promoting Universal Happiness—Selfishness—Right of Privacy—Casual Acquaintances—Haughtiness and Pride—Anger—Rudeness—Cheerful Demeanor—Drones and Workers—Empty Ornaments—Keeping Engagements—Diffusing Good Cheer.

DEPORTMENT is the manner of carrying one's self; carriage, manner, or behavior. Good looks are very desirable; but far more depends upon behavior. The neatness of the person, upon which we have so strongly insisted, is a part of behavior; so is dress, which is a mode of expression; and which gives us methods of enhancing and displaying beauties, as well as of concealing defects.

But a handsome and well-dressed person may be awkward and constrained in manner; stiff or slouching in gait; angular and extravagant in gesture; sullen, haughty, insolent, cold, rude; or shy and sheepish; or craving, fawning, and impertinently familiar. There are a hundred graces and excellencies of manner in the position of the body, the attitudes, movements, gestures, poses of the head, carriage of the arms, placing of the feet, and all those nameless properties and charms, which are in some the unconscious and spontaneous expression of their natures, and, in others, are more or less acquired by the faculty of imitation, and careful training and culture.

It needs no argument to prove that beauty was not intended alone nor chiefly to give happiness to its possessors; and that, consequently, society has pre-eminent rights in regard to it. The possession of beauty, then, brings with it a heavy responsibility. You have no right to abuse, or mar, or spoil it. You have no right to lose it, by neglect of health, or any habit which tends to the destruction of

beauty. You have no right to hide it in ugly and deforming costumes. You have no right to mar it by any lack of grace and propriety of manners.

Attitude, the simple pose of the body, is a matter of great importance. It reveals character and breeding. A gentleman or lady stands confessed. Awkwardness and vulgarity are shown in attitude. Once, at an entertainment, we saw a house, full to the gallery, give three rounds of plaudits at the simple silent act of a peasant girl sitting down in a chair. It was nothing else. It had nothing to do with the plot of the piece. It was simply and only sitting down. But what grace, and beauty, and exquisite delicacy were revealed in every movement, and the quiet, easy attitude into which she sank was a living picture that charmed every beholder.

Awkward Postures.

The first polite accomplishment is to know how to stand. An awkward person is in a perpetual fidget, and changes incessantly from one uneasy posture to another. He knows not where to put his feet, and his hands are utterly superfluous. There they go—now behind him, now into his pockets—now under his coat tails; and so he fidgets and shifts his weight from one leg to the other, and becomes all the more awkward from the consciousness of his awkwardness. If he could possibly forget himself, and let his limbs take care of themselves, it would be better. The same is sometimes true of ladies.

The conditions of good deportment are simplicity, or absence of affectation; ease, or absence of constraint, fussiness or fidgetiness; and self-possession, self-command, or freedom from timidity. The whole is comprehended in simplicity. Simple manners are good manners. Quiet, easy, calm self-possession gives unconscious grace and dignity.

The perfection of good manners is repose; not languor, nor affected coolness, nor hauteur, but the calm, quiet, simple dignity of the true gentleman or lady. Such persons stand quietly on both legs, but bearing a little more weight on one than the other; the toes turn

out neatly, the head is a little turned, the body is never kept a hard straight line—but all is natural ease and unaffected grace.

The arms hang naturally from the shoulders, the hands are in some quiet position, the fingers curve gracefully, with slight partings between the first and second, and the third and fourth. There is no stiffness, no uneasy shifting and fidgeting, no moving of fingers or features, but all is rounded and graceful as a statue. It is worth some pains to be a lady of good standing in society.

Graceful Walking an Accomplishment.

One should learn no less to sit at ease. Formerly, ladies were trained to sit upright, and never touch the back of a chair. They might as well have sat on stools. It is now permitted to lean, and, where one is intimate, to lounge; but it is never permitted to be awkward or ungraceful—never to stretch out the legs, or spread them apart. No gentleman tilts up his chair or sits astride it; or fusses with his feet, or drums with his fingers. He sits like a gentleman—it is difficult to describe how; but every one recognizes it, and every one should do his best to imitate it; or by being a gentleman, to make it the natural expression of his character. So, too, a true lady studies ease and grace.

The gait and air in movement are more complex matters. To walk well, easily, gracefully, is a very important accomplishment. What we do so often we should do well; and walking is not only useful and necessary, but a great enjoyment; and every man's gait is the expression of his natural and acquired character. The gait may be heavy or light; neat or clumsy; erect or slouching; pretty or ugly; quick or slow; awkward or graceful. The walk or carriage of the body expresses every virtue and every vice, every beauty and every deformity, habits and diseases.

As the mind and heart are expressed in bodily movements these movements in return act upon the intellectual and moral faculties. The raw recruit, drilled into the accomplished soldier, has his mind "set up," and brought into soldierly habits, as well as his body. The

training of the body certainly affects the mind, and there is more than an analogy between physical and moral uprightness and grace ; and the drill-sergeant and dancing-master exercise a deeper influence than has commonly been recognized.

The drill-sergeant takes a booby, a clodhopper, a graceless vagabond. He straightens him up, turns out his toes, brings back his shoulders, throws out his chest, and in a few months makes a soldier of him—a straight, well-set, firm, alert, active man—a self-reliant, courageous soldier. And he is a different man forever after. His character has changed with his bearing. Much of the ignoble and awkward in his nature, which found habitual expression in his mien, has been suppressed, driven back, or rooted out like weeds ; while the finer and more manly characteristics are brought into activity, strengthened by exercise, and rendered habitual ; and this man, to the last day of his life, shows something of the manner and bearing, and exhibits correspondingly the character of a soldier.

All Done by Training.

And the dancing-master or teacher of gymnastics and the graces of posture and movement, performs a similar but more refined office. It is his business to bring out, develop, cultivate, and render habitual, the dignities and graces of polished life. He teaches the pupil how he should carry his head, strengthen his limbs, stand, sit, bow, walk, or dance, if dancing is the fashion of the time. He trains him into the external expression of a pure and refined and elegant character ; and, as in the case of the soldier, the external acts upon the internal, and a man becomes really what he endeavors to appear.

And in this we have much of the philosophy of education and social culture. By exercise our dormant faculties are brought into action. Internal action may be induced by the external expression. Be what you would appear, certainly ; but also appear what you wish to be. Assume the air and manner of calmness, and it will help you to be calm. Put on the natural action of any faculty, and it will excite its activity. Thus we may refine and purify the character.

When we are trying to reform our lives and make ourselves the best we can be, we may begin with the external deportment.

The carriage of the body, and habits of dexterity, grace, and elegance are of great importance. Children, it is said, are always graceful—they are simple, unconscious, unrestrained, unaffected; and the attitudes and movements of a child ought to be as pretty as those of a kitten or a bird. But we fall into bad habits; stoop until we grow round-shouldered; get into awkward, lounging ways; carry our hands uneasily as if they did not belong to us, and make ourselves generally disagreeable.

Straight Figure and Full Chest.

A little care, a little resolute training, the observation and imitation of ease and grace in others, will do much to remedy these besetting sins. If a boy or girl will every day stand with the back against a wall, and brace up in physical uprightness, it will soon cure a drooping spine. If they will resolutely let the arms hang quietly at the side, they will conquer the bashful tendency to fidget with the fingers. If a girl will daily open her chest, and breathe full breaths for some minutes, she will improve her health and figure.

Every school-master and school-mistress ought to be somewhat of a drill-sergeant, and attend to the personal appearance and habits, carriage and manners, of the pupils. This is the specialty of the dancing-master and gymnast, no doubt; but as every school cannot have its special teacher of gymnastics and dancing, all our teachers should be capable of giving the rudiments at least of refined carriage and manners.

In the absence of direct teaching, much is done by unconscious or conscious imitation—only we should know what models we ought to admire. The worst habits of more exalted personages have found multitudes of imitators. Every one who, by position or talents, grace or beauty, makes an impression upon others, is a teacher of manners. How little do people think of their responsibilities.

To walk easily the body must be erect, but not stiff; the arms must swing, not too far; the chest expanded for full breathing; the

shoulders held back ; the toes a little, but not too much, turned out ; and all the muscles of the foot brought into a springy, elastic action. A fine gait in man or woman, as in many animals, is one of the prettiest things in the world. Avoid walking stiffly, slovenly, clumsily ; and ladies, because they wear long dresses, must not, therefore, be careless of their feet, turning in their toes, or lifting their skirts with their heels.

Be Careful to Avoid Fatigue.

Walking is good exercise ; but one may have too much of it. It is a relief from sedentary and monotonous employment ; but where there is much brainwork, long walks are too exhausting. A short, brisk walk, quickening the circulation, and consequently the breathing, is better. Delicate persons and invalids are injured by long walks. The vital forces are limited, and must be used with economy.

In our efforts to live a good life, satisfactory to ourselves and pleasing to our fellow-creatures, there are many things we must carefully avoid. We must avoid every action that is painful, disgusting, offensive or troublesome to those about us. We must "cease to do evil," and then "learn to do well," in the little things of life as well as in the most important. We talk of rights and freedom, but no one has a right to do the smallest wrong to himself or another. There is no freedom but the right to do right. Every improper act really injures both ourselves and many others. We have no right in any way to diminish our power of being good and doing good. A musician, playing out of tune, hurts his own ear, and offends the ears of all who hear him. The man who does a distasteful act when quite alone hurts his own sense of propriety ; if he does it with others he offends them and injures himself.

No one has the right to appear in public in a dirty, disorderly or unbecoming costume. In this matter there is a world of difference in different countries. You may go every day to the most frequented public resorts in Paris without ever seeing a man, much less a woman, in offensive attire. Can the same be said of all places of public resort in America ?

What belongs to the toilet should never be done in public. One may repair an accident, put up a stray ringlet, arrange a shawl, tie a string; but one may not comb the hair, clean the nails, or touch the nose or ears. It is not delicate to scratch one's self. Only under the most urgent necessity can one blow her nose in company. It may be wiped, not blown, if it can be avoided, especially at table. In England no one is ever seen to spit—we wish the same could be said of all parts of America. Where spitting is unavoidable, use a pocket handkerchief; and in all such matters take great care never to be for one instant an object of disgust. In this matter the French and Germans are nearly as bad as the Americans, and Vienna is the only place we know of where the churches are furnished with spittoons.

We think those who wish to live purely and delicately, and never injure themselves or offend others, must avoid coarse eating as well as coarse drinking. There are kinds of food which are uncleanly and unsafe. Onions taint the breath too much for general society. If all eat onions, it is different. Cabbage is doubtful. Some kinds of fish, as herrings, not only taint the breath, but their odor exudes from the skin.

The Sin of Gluttony.

A pure and inoffensive diet seems to us a cardinal point in good behavior. Gross feeding, in quality and quantity, produces obstructions, obesity, heaviness of body and mind, and so many unpleasant diseases and conditions as to unfit people for society, and even for life; and gluttony is worse, if possible, than drunkenness, both being rightly reckoned among the deadly sins, any tendency to which every well-meaning person should carefully avoid.

Try to free yourself from all annoying habits. Do not make disagreeable noises, nor any noises that can be avoided, in eating or drinking. Never hum or whistle, unless quite alone. To do either in company may be very disagreeable. Beware of sniffing, or any unpleasant sound of nose, or mouth, or breathing. Sleep with your mouth closed, so as to never snore. So resolutely guard your life from any impropriety that you cannot even dream of one—for a career

conscience never sleeps. It is the strong desire and resolute will to be right and do right that is wanting in those who do wrong.

In a word, avoid everything wrong, everything improper, everything that hurts yourself or that may be annoying or disagreeable to others ; and do what is just, right, good and pleasant to all about you. The desire and will to do this is the foundation of good behavior. There must be a good heart, then a good understanding, taste, tact, delicacy, all that belongs to an active benevolence, extending to the little things of life as well as the greater and more important. Often we cannot see our own faults ; therefore, we should invite friendly criticism, never be hurt by it, and do our best to profit by it.

Members of a Common Society.

Men are gregarious—made to live in societies—their well-being and happiness very largely depending upon their associations with each other. We come together in friendship, love, mutual help, and in many ways to benefit or amuse one another. We live in families, neighborhoods, societies, churches, and all sorts of industrial, benevolent, civil and military organizations. We are parents, children, brothers, sisters, masters, servants, variously related to those around us—bound together by common interests, and we should all be working together for the general good ; all for each, each for all. The welfare and happiness of society depend upon the behavior of its members to each other—upon what we call manners—upon the way in which each one makes himself or herself pleasant, agreeable and useful to all around him.

We have already spoken of the care of the person necessary that we may avoid giving disgust or pain, and which will make our presence a delight ; of dress for comfort, health, and a decent, and even elegant adornment of the carriage of the body or deportment ; and now we must consider how people should treat each other so as to promote each other's happiness.

The foundation of good manners is in that love of our neighbor which religion requires as the second duty of every human being, and

which naturally follows from fulfilling the first; for it is impossible for us to love God without loving also our fellow-men. This love gives us the desire to promote their well-being and happiness. If we have this love for them we can never treat them with rudeness or injustice; but always with respect, sincerity, kindness, delicacy, and true charity. A good person has the foundation of good manners. The Christian must be essentially, and in feelings and intentions, a gentleman or lady, though outwardly falling short of the courtesy taught by St. Paul.

One of the first points of good breeding is to respect the person and the rights of others—never to intrude upon them; never to be rude; never to be in any way troublesome or offensive. We have something to learn in this matter. When a Frenchman enters the company of others, if only in a wine-shop or an omnibus, he deferently salutes the company by raising his hat, as much as to say, “by your good leaves, ladies and gentlemen.”

Always Mindful of Others.

He never enters the shop or *café* without politely saluting the person in charge, and he does the same on leaving. “If you please,” is on his lips continually, and at the slightest possible offence, or the least accidental encroachment, he gracefully begs your pardon. In the greatest crowd in Paris, one is never crowded. Each person is careful not to incommode his neighbor. No matter how many may assemble at the doors of a theatre or other place of amusement, they never crowd each other; they never struggle for the best places; there is no ugly rush, with women screaming from pain or fright, and possibly fainting and being trampled upon.

Every one has the right of privacy—the right to be alone—the right of silence and seclusion; and even in the intimacy of family life, this right should be carefully regarded. One should never approach another without some indication of welcome; never enter the private apartment of another without being sure that it is not an annoyance. There is need of tact in these matters, and at the least sign of disquiet,

we should increase our distance. We need not be shy or bashful, however pretty and graceful a certain amount of these qualities may be, but in kindness and in justice, as well as from self-respect, and the desire to stand well with others, we should carefully avoid intrusiveness.

Rules of Salutation.

It is for the elder person to first salute, or welcome the younger ; for the person in a higher social position to recognize or address one in a lower ; for a lady to be the first to salute, speak or hold out her hand to a gentleman. When two strangers meet, if there is any obvious difference in age, rank or position, it should be regarded. A boy should not enter into conversation with a man, nor a gentleman with a lady, beyond some slight civility, without due encouragement.

When persons meet on equal terms, in a railway car, at the seaside, or wherever accident may throw them together, although there should be no intrusion, there may be, and ought to be, on the part of every one, a frank, kindly, neighborly readiness to help each other by word and deed.

Very pleasant acquaintances are made, and life-long friendships are sometimes the result of pleasant, friendly, and genial manners among fellow-travellers. The habitual reserve of most people is senseless and cruel.

All our conduct to our fellow-men should show our respect for them, our regard for their rights, our desire for their happiness. The first element of good manners is unselfishness. The moment a lady thinks too much of herself, her own rights, her own happiness, she begins to be rude to others. The more entirely she devotes herself to securing the comfort and happiness of all around her, the better will be her manners, and good manners are "twice blessed." As the principle of all good conduct in society is the love of the neighbor, and an active philanthropy, so the element of all evil is egotism, selfishness, or the desire of one's own good and happiness, without regard to the rights and welfare of others. Thus, manners must be based on morals, and minor morals and major are really the same.

Haughty manners are the language of pride ; cold manners, of indifference to the comfort and happiness of others ; rude manners show a want of respect for the feelings of others ; scornful manners are a disregard of their rights ; cynical and hypocritical manners are selfish and bad ; good manners are the expression of good feeling, grace, delicacy, and refinement, free from pride, selfishness, or vanity.

A noble manner comes from a generous disposition—a heroic desire to sacrifice one's self for the good of others. Genuine politeness shows itself to the poor and humble. A true lady is specially kind to the aged, the infirm, the unattractive ; to those least likely to receive attentions from people who are only seeking their own pleasure.

Show a Sunny Disposition.

Cheerfulness comes from health and hope. Animal spirits make us cheerful in the enjoyment of life and its sensations, but hope and charity give a spiritual cheerfulness, and even gayety of manner, which is very delightful. As far as possible, we should never show gloom or melancholy to those around us. If we carefully conceal what is unpleasant in our bodies, we should do no less with our humors or dispositions. We should never let it be seen that we are angry, cross, peevish or low-spirited, where such mental states can give disquiet or pain to others. But the best way is never to be angry, cross, peevish, fretful or disagreeable.

That one should feel a flush of anger at injustice or rudeness ; that one should be indignant at insult or outrage is natural ; but in most cases there should be no violent expression of anger and indignation. We must never forget ourselves and what is due to our own character and dignity. There should always be in our own feeling and expression more of sorrow than of anger ; and we must be ready to forgive every injury, as we hope to be forgiven.

A serene gayety, a courageous meeting of all the troubles and trials of life, is supremely good conduct and good manners. Calmness, patience, the firm possession of one's self, are great virtues, but triumphant serenity or joyousness is more. And it is an emphatic

precept of religion: "Rejoice always; again I say rejoice." This is the triumph of the higher sentiments of faith and hope over the lower feelings of distrust, grief and anger. But a woman may train herself in good feeling and good conduct as readily as she can avoid being round-shouldered. It wants but a resolute will to secure either bodily or spiritual uprightness.

Idle and Thriftless Women.

Every human being should do his part—whatever he is best able to do—in the work of life. An idle man or woman is a burden on industry, and generally worse than a burden. Certainly it is not polite to live on the labor of others without rendering some equivalent. Doubtless there are people who are ornaments to society, but has any one the right to be merely an ornament? Can one fairly claim a living in the world who only amuses herself and does no good to others? These are serious questions.

If those who do the world's work, and provide all the necessities of life, are content to feed, clothe and shelter persons who are merely ornamental—pretty to look at—it is their own affair, but it seems to us a point of honor that every one should do something for her daily bread, and not be willing to live upon the labor of others, without rendering some equivalent service. No one grudges pay for useful work, or for ornamental work, which is only another kind of use. We cheerfully pay the author of any book we care to read, or the painter of any picture we care to see, but we do not so cheerfully give a portion of our hard-earned money to support people in idleness who do us no good and give us no pleasure.

We bear patiently what is, not seeing the way to mend it; but if any of us were to go to work to organize a new society, should we find any place in it for people who live upon our industry and render no service in return? But these are matters, you think, rather of morals and political economy than of manners. We are not sure of that. It must be bad manners to pick a man's pocket in any way, or to add to the burden of labor, or the oppression of the poor. But

there will be no question that to be disorderly in one's life, to be unpunctual, not to keep promises or fulfil engagements, or pay one's debts, is very bad manners.

A lady should be orderly in the smallest matters, mindful of all promises, duties, and engagements ; always prompt, always punctual, never disappointing or vexing another by her neglect. A lady is one who can be depended upon to do what is right and just. Every engagement is sacred. You are sure that she speaks the truth. You know that she will keep her promise if it be possible. Her word is as good as her bond ; and she will do what she sees to be right in every case, whatever may be the law about it. Upright and downright, pure equity governs all her actions. You can trust her utterly.

The Golden Rule.

In all our relations to others, and our intercourse with them, we should try to enter into their views and feelings, and see things from their standpoint. "Put yourself in her place." Treat a servant as you would wish a master or mistress to treat you. If you would have friends, be friendly. Be at your ease in simple self-possession, and put others at their ease by accommodating yourself as far as you can to their manners. If George IV. did pour his tea into his saucer when he was taking tea with some old ladies who followed that fashion, he showed that he had some claim to be called the first gentleman in Europe. A wise conformity in little things is far better than the assertion of an insolent superiority. A delicate regard for the feelings of others is the essence of politeness.

With a person of thoroughly good manners we are always at our ease. If we speak, we are sure of being listened to with attention and sympathy. If we have a favor to ask, the way is made easy. If granted, it is done so graciously as to double its value ; if refused, it is so kindly done that we scarcely regret it, and feel sure that the refusal was prompted by the best motives. We meet such a person with pleasure, and part with real regret. A sunshine of genialty gives warmth and pleasantness to all about her.

CHAPTER XXXIII.

THE SOCIAL QUEEN.

Qualifications for Good Society—Value of Birth and Breeding—Honor to Ladies—Mistress of the House—Introductions—Salutations—Rudeness to Others—Polite Attentions—The Sexes Should Go Together—Variety of Ages—Perfect Equality—The Industrious Woman—Agreeable Companions—Taste and Refinement—Woman's Mission is to Adorn—Rules of Etiquette—Simplicity in Behavior—Little Observances—Receptions—Making Calls—Use of Cards—Taking Leave of the Host—Punctuality—"Doing in Rome as Romans Do."

SOCIETY is a word of large and various meaning. We talk of being in society—the interests of society—a good position in society—fashionable society—general society. It is properly the friendly meeting of people together to enjoy conversation and amusement with each other. To enjoy society, mutual protection, help, and to be amused with each other, men gather in villages and towns. Meeting often, they find the necessity of making themselves agreeable to each other. They refrain from offensive or injurious conduct, and they find frequent occasions for mutual civilities and reciprocal good offices.

To live pleasantly with each other, men must abandon, or at least conceal, selfishness, injustice, evil tempers, dishonesty, falsehood, and every mean and annoying disposition, and become, or at least appear to be, kind, friendly, disinterested, obliging, cheerful, honest, and honorable. Contact rounds off the rough edges of character, and gives polish to the manners. Politeness, civility, and urbanity mean the manners of people who are refined.

In a large sense, every person is considered a member of society; but we speak of a solitary person as one who goes into no society—meaning one who neither visits nor is visited. A disreputable person is not admitted into society. A morose person shuns society. A person of loose habits and associations mingles in low society.

Where a hereditary aristocracy rules, a man's social position de-

pend upon his ancestors. Of such men it has sometimes been said that the best part of them is under ground; but no one can deny the advantages of birth and breeding. Wealth gives the means and conditions of the highest culture. We have breeds of men as distinctly marked as our breeds of dogs and horses, and men are born with noble, heroic, and beautiful qualities as they are with unfortunate and base ones.

We speak rightly of born liars and born thieves. There is, therefore, an aristocracy of birth, and to be well born is a great good fortune. But this kind of aristocracy is not always that of rank, title or wealth. The child of healthy, honest, educated and refined parents is well born and a true aristocrat.

Honor Paid to the True Lady.

High society is composed of people of rank or wealth, who are able to live in a certain style of luxury and splendor; who can give elegant dinners and balls, and assemble around them people of taste and fashion. Good society is composed of good, friendly, intelligent, tasteful people, who can benefit, interest, and amuse each other.

Everywhere in society ladies have precedence and honor. They are to have the first seats and the best seats. No gentleman can be seated while a lady stands. No gentleman can help himself to anything until ladies are helped. It is a principle of society that women are to be everywhere deferred to, protected, esteemed, and honored. More deference is shown to women, as women, in America than in any country in the world.

Over all social festivities the lady of the house presides. She receives calls, gives invitations, welcomes the guests, sits at the head of the table, and is the social queen. The husband devotes himself to the ladies, and generally to the comfort of the guests.

To enter a society to which one is a stranger, some introduction is required. Going to a strange district, one carries letters of introduction. A man presents you to his friend, and vouches for your social position and good conduct. He introduces you to others. The

Texan gentleman had a very proper idea of the responsibilities of an introduction when he said : " Mr. A., this is my friend, Mr. B. ; if he steals anything, I'm responsible."

But such social endorsement, whether by word or letter, should not be lightly given. A man may not pick your pocket, but he may be a bore, and steal your time and patience. You do not wish to make the acquaintance of a man who will ever annoy or injure you—one whom you cannot trust in every way.

But there are cases in which no introductions are required. People thrown casually together, as at hotels, in watering-places, and generally in travelling, can always make modest advances towards such temporary acquaintance as the circumstances warrant. A satirical poet has represented two Englishmen cast away on a desert island, refusing to speak to each other because they had not been introduced. The more entirely a man is a gentleman, and the woman a lady, the more they are at their ease, and disposed to be kind, courteous and considerate of all around them. It is a quality of true nobility that it " condescends to men of low estate."

When Introductions are Not Needed

No introductions are needed between people invited to a dinner or tea party or assembly of any kind. The fact that two persons are the guests of a mutual acquaintance is an introduction to each other. You have a right to offer a civility, or the charm of your society, to any lady present. You can ask any one to dance. You can enter into conversations.

A lady does not eat or drink without asking her neighbor to partake. You never open and read a letter in company without the apology of asking permission. All fondlings and familiarities before company are improper. You have no right to do anything which any other person has not an equal right to do. The assertion, therefore, of any exclusive right to the attentions of your husband, in the presence of others, is a gross indelicacy. Consequently, every appearance of this kind is carefully avoided. At table, husband and wife sit

as far as possible from each other, and at balls husbands and wives are separated and take other partners. Society is the enlargement, the absorption, and, for the time being, the breaking up of all private and exclusive engagements.

For a similar reason, *tete-a-tetes*, or the private conversation of two persons, exclusive and long continued, should be avoided. There are opportunities enough for private love-making, courtship, etc. If a gentleman wishes to see a lady alone, let him make a special visit for that purpose; but in public, all talents, all charms, all the intelligence, and wit, and sentiment of conversation—all the graces and accomplishments—are the property of all, or at least of the group of those who are attracted to each other by similarity and sympathy.

The Sexes Should Not be Separated.

As a rule, men and women should meet together in society. The influence of men upon each other, when left to themselves in clubs or at the dinner table, is not of a very refining character; and women, when left to themselves, are said to indulge too freely in tittle-tattle and scandal. Each sex has a restraining and elevating influence upon the other. Society is, properly speaking, therefore, the mingling of both, and assemblages which are all male or all female are not society. And in a social assemblage, every group, when it is large enough to break into groups, should be composed of both sexes.

In our own country, where experiments are more freely and boldly tried than in Europe, there are colleges where young people of both sexes are educated together—living in the same boarding houses, eating at the same tables and reciting in the same classes—and the result has been admirable in its influence upon both. The young men have been made more manly, and the young women more womanly, by the influence of each sex upon the other.

There should also be, we think, in all society, a considerable variety of ages. The model of a true society is a family of three generations. The unnatural hours of fashionable assemblies make them unsuitable for children; but we see no reason why boys and girls of

fifteen, and all ages from that to a hundred or more, may not mingle in social gatherings. The very old enjoy the company of the very young. But, as no one should go into society who cannot in some way contribute to its enjoyments, the age at which one may be admitted must depend upon fitness in manners and acquirements.

When Social Distinctions are Proper.

All persons in society are equal. In conversation and in amusements all distinctions are laid aside. The sole exception to this is when a procession is formed from the drawing-room to the dinner-table, when the lady of the house takes the arm of the gentleman who is the most distinguished guest or greatest stranger, and the host offers his, next in order, to the most distinguished lady or greatest stranger, and then all march down in the order of their rank or social position.

But, once returned to the drawing-room, all this is laid aside, and the only distinction is the power to please. A beautiful and accomplished lady is queen; the most elegant and interesting man is the centre of attraction. A brilliant commoner is better than a dull duke. By common consent, society lays aside artificial distinctions, and attends only to natural and acquired advantages, to character, genius and manners.

What we want for the enjoyment of society is the intelligence that qualifies us for conversation; the wit that makes us entertaining; the tact, delicacy and regard for the feelings of others which will preserve us from doing or saying anything which can hurt or offend them; the amiability or kindness of disposition which will make us seek to render everybody about us happy, and the presence of mind, or possession of ourselves, which will allow us to say and do everything in the best manner. The more we can dismiss self, the less we have of self-consciousness, and the idea that everybody is concerned about us—the more we are occupied with everybody and everything but ourselves—the better for our social success.

As women are the queens of society—as there can be no society,

properly speaking, without them—as they are its one attraction and perpetual charm, everything depends upon their fitness for its duties and requirements. A vulgar or silly woman, an awkward or ill-tempered one, makes society with her impossible. Happily, such women are rare. Most women have the gifts of grace and amiability. They are the natural centres around which the best elements of social life spontaneously gather. And in spite of fashionable follies and frivolities, women every day become more brave, self-reliant, free, noble, and, in a word, womanly. Every day there is less oppression of the physically weaker, but morally stronger, sex—stronger by influence, if not by character.

You Should have Useful Employments.

There is nothing unwomanly or unladylike in every woman being industriously and usefully employed. Every woman ought to be able to make her own clothing, and the clothing of at least young children. Every woman ought to know how to cook, so as to prepare a good meal in case of need, and to teach and direct her servants. She should be able to do everything that makes a house comfortable and elegant.

Once, every lady, the highest in the land, could make bread, and spin, and weave, as well as sew and embroider, and women have not gained in character, nor the country in prosperity, by the loss to women of nearly all kinds of domestic work, and removing so many useful and beautiful arts from the household to the factory. Women have lost many useful avocations, and are now crying out for others. Knitting, crochet, and fancy-work do not satisfy them. Dressing and making calls is not a business for life. Only a few have the gifts which qualify them to be artists and authors.

The lack of sensible and useful employments drives women into unladylike and immoral practices. They must do something. A young lady, full of health and animal spirits, cannot spend all her time in reading novels. She is driven to dissipation and flirtation. What she reads so much about she wishes to experience. She pre-

serves her reputation, no doubt, but what becomes of her character? And, in the absence of other interests, there comes to many young women the feverish desire for marriage and a settlement in life—a thing which should never rest in her thoughts. It spoils the charm of any woman to be always thinking of a possible husband.

Making Matches and Hunting Husbands.

Match-making mammas are bad enough—husband-hunting girls are intolerable. They repel more than they attract. A woman is never so charming as in utter unconsciousness of charm—never so attractive as when she has no thought of attracting. In society, all possibilities of future relations should be kept out of sight, and every one treated according to his merits. Men and women in society do not meet as husbands and wives, or lovers—only as members of society, in unrestrained freedom to make themselves agreeable to each other.

An evident flirtation with any one is a rudeness to all the rest of the company. Special attentions are in bad taste, and sure to offend. And when a lady feels that she has made the impression she most wished to make on a man she desired to attract and charm, because she felt his worth, though her heart may bound with happiness, she must no more show it than she can show the antipathies and disgusts excited by others.

A true-hearted woman, with a fair amount of culture, a person not disagreeable, with some taste and observation of life, and a warm benevolence, and desire to please, can scarcely fail to make herself an agreeable and welcome guest in every circle. But a false, uncultured one, with no taste or care for pleasing, critical and censorious, jealous and malicious, is one of the worst samples of the feminine part of humanity.

A lady of taste, refinement, and with so much of wealth and fashion as to give her a certain position in society, may become the centre of a circle, a social pivot, an educator, and in many ways a benefactor. Her furniture, the order of her apartments, her pictures and statuary,

her own dress and ornaments, may be such as to give pleasure and improvement to every person who visits her. Why should not her boudoir or drawing-room be as nicely arranged, and as pretty a study in art, as any picture? Is she not herself, in the possibilities of her air and manner, in pose and gesture, in dress and ornament, a work of art, as she may be much more in feeling and expression?

Her sphere is to cheer, to refine, to beautify, and bless. The opportunities and influence she may thus acquire, she may turn to the noblest and holiest purposes. You make a call of ten minutes on such a woman, and she lives in your mind and heart a picture of beauty, grace, and charm for long years after. Her dress, her air, her sweet, engaging manner, the few well-chosen words of genial politeness, the melody of her voice, the kind glances of her pure and tender eyes, the gentle pressure of her soft hand, all thrill in pleasant memories.

Visiting Cards and What they Mean.

The word *etiquette* means a ticket, and the ceremonies of special occasions were formerly written on cards or tickets, furnished to each person who took part in them. Such cards are still delivered, in some places, to the mourners at funerals, and we have bills of fare at dinners, the order of dancing at balls, and programmes at entertainments. So cards of invitation tell us that there is to be dancing, and cards of admission sometimes specify what dress is to be worn. Thus, evening dress is required on various occasions.

Chambers's Encyclopædia, says: "Popular publications are constantly issuing from the press for the purpose of teaching etiquette, or the rules of behavior in good society. They will, for the most part, be found far less trustworthy than the promptings of nature, where the individual possesses a reasonable amount of reverence for others, and respect for himself. Yet there are certain conventionalities which can only be learned by instruction of some kind, or by observation, and the observation may be attended by unpleasant circumstances."

It is quite true that all our manners and observances are, or should be, founded on a common sense of propriety, of the duty we owe to

others, and a proper regard for the comfort and happiness of all around us. The best and cleverest people behave to others in certain ways, and we observe, admire and imitate them. There are fashions of manners as of dress, but they are much less changeable. In the East, every act of one's life has been reduced to rule and system, and the etiquette of China and Japan has lasted, with little change, for ages. Every one learns all that will ever be required of him in his conduct to superiors, equals, and inferiors, and in every relation of life.

In the West we are left more free, and there is more individuality and originality ; but with them we have also more that is disorderly and offensive. It is one of the great discomforts of social life not to know what is the right thing to do, what is expected of you, and how you can make yourself agreeable, or, at least, not disagreeable to those around you. We feel "at home" wherever we know how to conduct ourselves. Bashfulness, timidity, awkwardness, and all the confusion and suffering that they cause, come from not knowing how to behave

Well Versed in Etiquette.

The moment we know what we ought to say and do, everything is easy and delightful. A sensitive mind fears nothing so much as being blundering and ridiculous. There are few of us who are quite free of some dread of "Mrs. Grundy."

Education in etiquette begins very early. The mother trains the child from its earliest years—the child imitates its parents. Children are continually warned that this is not nice, and that that is not proper. A child brought up by and among well-behaved people, can hardly go amiss unless from natural perversity.

The misfortune is, that nurses, servants and even teachers, in many cases, have no aptitude for good manners or no instruction. If servants were selected for their good manners—if they were required among the qualifications of teachers—the demand would create the supply. Observation and imitation would be stimulated if good manners were the condition of success in life.

But there is wanting, first of all, the desire, and then the perception,

of deferent and refined behavior, and of its two elements, self-respect, and respect for others—true self-love and the love of the neighbor. The stolid indifference to all decent manners we see about us, comes from a want of sense of their importance, much more, we believe, than from a brutal disregard of what is right. When men stand upon the sidewalk, so as to oblige women to step into the gutter to get past them, it is charitable to think they are muddled with beer. When people crowd and crush you, and make mad rushes to get the best positions, violating every principle of decent manners, it seems like innate depravity—but it is, perhaps, only a bad habit which they have thoughtlessly drifted into.

And this exhibition of brutal selfishness is not confined to the lower ranks of life. The crowding and confusion are sometimes as great in the palace of the sovereign as at the pit entrance of a theatre. When George IV. left Carleton House the fashionable world was admitted to see its splendors. The result was a crowd in which ladies were crushed, trampled upon, and in some cases their clothes entirely torn from their bruised bodies. Such manners are what we might expect in a horde of savages. Surely they are not such as we look for among an enlightened and Christian people.

Little Observances are Important.

The little observances of social life are more important than many people think them. The outward signs or expressions of any sentiment not only manifest it to others, but help to keep it active in ourselves. This is the use of all ceremony and ritualism in religion. We strengthen our own reverence by external expressions, and help to excite it in others. A great assembly kneeling with bowed heads in prayer, or uniting in songs of fervent praise, is very impressive. And the same principle governs all social ceremonies and observances.

Salutations are social ceremonies. A gentleman raises his hat as a mark of respect; he touches it to intimates; he takes it off to ladies, and when he stops to speak to them, or to persons to whom he wishes to show a marked deference, he does not put it on till requested to do

so. The hat is touched or raised with the hand farthest from the person saluted.

We do not salute a friend who is engaged with a lady or a person superior in rank whom we do not know; but we join a friend in returning the salutation of a stranger to ourself. It is the right of a lady to recognize an acquaintance, or not, at her pleasure; and unless very intimate, a gentleman waits for such recognition. So of stopping for conversation. If we wish to converse more than a few moments, it is better to turn and walk with the one we meet. But a lady or superior must give the invitation. In passing persons frequently, you are not to salute every time. Once is sufficient.

Etiquette of the Parlor.

Visitors—if strangers—we meet according to rank, position, or intimacy. A gentleman meets a lady at the front door, and accompanies her to the sidewalk, or puts her into the carriage, at her departure; and the same with any person to whom he wishes to show particular consideration.

A lady receives in her drawing-room, and does not leave it for gentlemen unless age or position call for special deference. Ladies treat ladies as gentlemen do each other. The visitor salutes her hostess first and last. The manner in which we salute all persons should express the respect and kindness we feel for them, or ought to feel, and which they ought to merit.

By treating every one with courtesy we in fact demand of them the character and manners which merit our respect. We, in this way, put all on their good behavior. A polite lady is thus not only a teacher of politeness, but a practical reformer of manners and morals.

The place of honor in a room is the farthest from the entrance—at a fireside, the corners; at table, the right of the hostess and host.

Introductions are a convenient mode of making people acquainted with each other. The one who introduces becomes responsible for the good behavior of both. No one ought to introduce to another a man who will insult or swindle, annoy or injure him. There are

special introductions only for particular objects. At a ball, a gentleman is introduced to a lady simply as her partner for a dance. She is not required to recognize him again.

In merely formal introductions people bow to each other, but do not shake hands. Hand-shaking should be the sign of a friendly intimacy. When a lady gives her hand to a gentleman, it should mean that she accepts his friendship. The Americans shake hands everywhere and with everybody. There is abundant hand-shaking among the Germans. The English and French are more properly reticent. It is for the person to whom one is introduced to offer or withhold the hand.

As a rule, introductions should not be given except at the request or with the permission expressed or understood of the persons introduced; but intimate friends of both parties may presume upon its being desirable and agreeable. The inferior in age or position is always introduced to the superior, and gentlemen to ladies, unless there is a marked difference in rank or age; but when equals are introduced the form is repeated, and so each introduced to the other.

Letters of Introduction.

A letter of introduction should be brief and confined to the matter in hand, and given unsealed to the bearer. If given for any purpose of business, you can call and send it in with your card. Otherwise, send it with your card, and wait to have it acknowledged. If the letter is addressed to a lady, however, you must call, send it in, and, of course, give her time to read it.

Calls are very brief visits made in the morning, but the fashionable morning is any time before dinner. Morning calls should, however, never be made till sometime after lunch—say three o'clock, nor later than five; since people dine at from six to eight o'clock, and must have time to dress. Usually no call should last more than fifteen minutes, and when other visitors arrive, it may be shorter.

As there is no obligation to see people, ladies who do not wish to seem rude tell their servants to say "not at home" to those they

decline to see. They may be indisposed or engaged, but "not at home" is a formula which covers the whole ground, and is not to be taken literally. It may mean not "at home" to you on this occasion; and to most callers it is a welcome announcement. They leave a card, which answers every purpose of a merely formal visit.

Even this matter might be simplified. In a certain German town it was once the custom for everybody to call upon all his acquaintances on New Year's. As the town grew this became such a burden to callers and entertainers that they got to sending cards instead, which set all the servants in the town to running their feet off. Finally, the servants took all the cards to a central place, where they were sorted over, and each one carried home those intended for his family, which is the present excellent time-and-labor-saving custom.

Receptions and Refreshments.

A call or the card, its equivalent, must be returned within a week; and every entertainment, dinner, ball, to which you are invited, must be responded to by a call, if you desire another invitation. When about to be absent for some time, it is expected that you will make a farewell visit to your acquaintances. If you do not see them, leave your card with P. P. C. upon it—"Pour prendre congé" (to take leave). On your return, you are entitled to receive the first visit.

Receptions are admirable inventions for economy and enjoyment. Instead of spending time in calls, or money in dinners, parties, balls, etc., a lady sends a card to all her friends to inform them that she is "at home" on some evening once a week. If she manage her cards well, she may gather around her a delightful society. She has only to offer her visitors a cup of tea or coffee when they arrive, and a bit of cake or a sandwich later. No formal supper is expected. There is conversation and music.

The more really at home the hostess is, the better for her visitors, who come early or late, and stay as short a time or as long as they like. It is obvious that there can be only here and there one who can have such evenings; and no lady can expect to fill her rooms week

after week unless she has the tact to draw to her agreeable people, and, what is far more difficult, to order, regulate, and govern her guests, and banish bores, disagreeables, and incompatibles from her society.

At these receptions the less formality the better. Every one is introduced already by the fact of his admission. If you know the lady hostess you know all her guests, and you can in no way please her so much as by making yourself agreeable to any and all of them and especially to any who are, or seem liable to be, neglected. As at entrance you go and pay your respects to the lady of the house, so at your departure you very quietly take your leave of her at last, after having said a private good-bye to any others, and so vanish without disturbance.

Punctuality Must be Observed.

In all cases where there is a set time of beginning, the highest etiquette is perfect punctuality. No one can dine until the last guest arrives. To keep people waiting, to make a dinner spoil, is more than an impoliteness—it is an outrage. So, at a theatre or concert, be in your place before the curtain rises, so as not to disturb the enjoyment of others; and never be so rude as to leave just before the play or concert ends. Leave at the end of the last act or piece of music but one, if you please; but to disturb an audience by going out at the very climax of interest is a very selfish piece of ill manners.

But in almost all cases ill manners is some display of selfishness. Good manners consist in a consideration for the feelings and rights of others. What right have you to mar the enjoyment of music or a play by conversation? What right to stand up before people who are trying to see some spectacle? Every way in which you consult your own gratification at the expense of others is unmannerly and unjust. An honest man does what is right or equitable; a polite or courteous man goes always beyond this line, and high breeding is philanthropy.

No man of gallantry would allow a lady to wait for him one moment; and simple honesty requires that every one should be punctual in keeping engagements. To make sure, one should be a

few minutes before the time, at all events not an instant after. And let us advise punctuality in going as well as in coming, and especially celerity in taking leave. If parting be a pain, do not make it wearisome as well. If we "speed the parting guest," she should say good-bye, and go at once. It is not necessary to be rudely abrupt, but in saying good-bye, the sooner it is over the better for all concerned. Suspense is painful to the parties, and tiresome to spectators.

As a general rule, we do well to conform to the customs of the place or country we are in, showing thereby our friendly respect to the people we are among. If we visit a church, we should behave as nearly as possible like those who worship in it. If we cannot conscientiously do this, we had better keep away. So a republican, visiting a monarchical country, should be careful to pay the customary respect to royalty, and to conform generally to social usages. The first Christian Missionaries to China found their way to the hearts of the people by adopting their dress, learning their code of etiquette, and conforming, as far as possible, to their customs.

The way to learn all one needs to know of the etiquette and manners of any society is to be quiet, self-possessed, and observant. Notice what well-bred and easy-mannered persons do, and follow their example. Never be ashamed of not knowing anything, but take the first opportunity to ask some one what you wish to know and cannot find out for yourself. A request for information is always flattering. Every one is naturally pleased to show her superiority. Every one is happy to give information to another, and guide her in the ways he should go.

CHAPTER XXXIV.

THE ART OF CONVERSING WELL.

Value of Good Talk—Conversation of Animals—All Can Have Something to Say—The Good Listener—Guiding the Conversation—Regard to Rights and Opinions of Others—Making Others Talk—Topics that are of Mutual Interest—Wit and Humor—Anecdotes—Talk at Table—Sense and Knowledge—Prosy People—Hobbies—Slang—Egotism and Boasting—Pet Phrases—Long-winded Talkers—Impolite Questions—Giving Attention—Avoiding Discussions—Paying Compliments—Moral Character.

“GOOD TALK,” says the author of *Realmah*, “is ever one of the choicest things in the world, and wins all people who come within its sphere.” Our social life is chiefly conversation—a turning together—the interchange of thought and feeling.

It is probable that all animals which associate with each other have language and conversation—some method of communicating information and expressing feeling. Ants and bees evidently talk with each other. When a prize is at hand, or danger threatens, the whole swarm is quickly told of it. They act in concert. They carry on complicated operations quite impossible without some power of conversation. The hen clucking to her brood calls them to the food she has discovered, gathers them under her wings, or gives warning of danger when she sees a hawk hovering in the sky.

In a morning of spring, when the groves are full of melody, it must be that the melody has meaning, and that every phrase is understood, at least by birds of the same species. The lowing and bleating herds must also talk to each other. Dogs talk together, and learn to understand us much better than we do them. The elephant has a very human comprehension of the orders of his keeper; and elephants who live in societies hold converse with each other.

“Steed threatens steed in high and boastful neighings.”

The conversation of animals is natural or instinctive. If men ever had such a natural language, it has been lost. Instead of it we have

hundreds of dialects made up of artificial, conventional, articulate sounds. What we have of instinctive language consists in gestures, grimaces, tones, modulations, inflexions, emphasis. Whatever language men speak, we know by sight and hearing whether they are pleased or vexed—whether they hate or love.

Our conversation is, therefore, partly natural or instinctive in tones, gestures, and expressions of the countenance, laughter, tears, and all the picturesqueness and melody of speech; and partly artificial and conventional in the use of words, or articulate sounds, whose meaning has been agreed upon. The beauty of all conversation consists in the choice admixture of these two elements of language. We like to see those with whom we converse. The glances of the eye, the flushings of the cheek, the smiles or frowns, and all expressions of feeling on the mobile face, the motions of the head, the slight shrugs of the shoulders tell as much as, often far more than, the spoken words.

Good Talkers and Readers.

Then how much more expressive is speech than writing. The written word has one meaning—the spoken word may have a dozen. We vary it with every mode of utterance. Written language, however carefully taken down, may give but the faintest idea of the eloquence, or even the meaning of a speaker. Thus no reporter can do justice to some orators, who have produced the strongest impression upon multitudes of hearers; people delight us with the warmth, grace and vivacity of their conversation, whose words, if accurately written down, would seem tame and insipid. The life that goes with the speech is wanting. In reading, words have what we are able to put into them. Good readers are those who can express the sense and sentiment of a writer as he would wish to express them in speech.

As we all talk more or less; as conversation is the life, the nervous circulation of the social body, we should try to talk well. To do this we must have intelligence, knowledge, facts of interest, things and thoughts, ideas and sentiments, which others may wish to hear; and we must be able to convey our ideas in a clear and pleasant manner.

Every one can bring something to the common stock of conversation—the commerce of knowledge and thought, where all freely receive and freely give. The preacher is paid for his sermons, the lawyer for his opinions, the doctor for his prescriptions, the author for his writings, but conversation is generous and free. It asks only reception and appreciation. Those who have are eager to bestow their treasures, and good listeners are as necessary as good talkers, and required in much larger proportions, for to every talker there ought to be ten listeners.

When companies divide into couples, and a large room is full of the hum of private discussions, it can scarcely be called conversation. A large party must break into groups, but not into couples. When people know how to listen as well as to talk, the larger the group the more life and variety to the conversation. We doubt if two persons can properly occupy themselves in conversation without an apology to the rest of the company.

Guiding the Conversation.

It is well that every group should have its leader or centre ; not always the one who talks most or best, but the one who listens, manages, suggests and draws out or gives opportunities to others. A lady of tact and intelligence does the best. She guides conversation as the coxswain steers the boat, or the four-in-hand driver manages his team, checking the restive, touching up the dull, and keeping all in order and up to their work. A lady who can do this, not only for a single group, but for a drawing-room full of guests, arranging compatibilities, and seeing that all are having the best enjoyment of these opportunities, is fit to be a hostess and social queen.

If the first qualification for conversation is to know how to speak, it is, in some ways, a more important one to know how to listen. We draw out, encourage, excite and elevate by our manner of receiving and accepting what one says. The orator gets life, suggestion and support from his audience. He is borne up by the waves of their appreciation. Good listeners make good talkers.

A good listener never interrupts, unless very adroitly with a question or objection, which is also a suggestion and help to the speaker. A good listener is patient and courteous, and does his best to give every one his full opportunity. He does not necessarily agree with what is said. The free expression of difference of opinion is the life of conversation; but a courteous, and even friendly toleration is its necessity. There is a limit to the proper expression of feeling in conversation; and dissent may be very decided, without being violent or disrespectful.

Let People Speak Freely.

We must have the same regard to the rights of others in conversation that we ought to have in business. Let every fact have its place, and every argument its weight. To interrupt, overbear, crush with clamor, silence with assumption, are violations of equity, as well as politeness. We may discuss freely, but never dispute; we may fairly controvert, but we have no right to denounce. And we can never impute bad motives to persons who hold opinions contrary to our own. A man may be wrong in his facts, absurd in his logic, and his doctrines may be ever so distasteful, or even dangerous, but he must be treated with kindness and civility, and his motives judged of with charity.

It is better, perhaps, that subjects which excite strong emotions, and are liable to produce partisan conflicts, should not be made subjects of conversation in general society. In a country where there are so many religious sects and opinions, giving rise to violent animosities, it may be well to banish religious discussions entirely; but when newspapers, pamphlets, books, treating of such subjects, are read by almost every one, it is very difficult to keep them out of general conversation; and conversation is, as it must be, more polite than writing.

To be a good listener, then, we must be very tolerant—not of error itself, but of its expression; not of the fault, but of the individual who is faulty. As one may detest the sin, and yet love the sinner, so one may reprobate what he esteems a false opinion with entire calmness

and unfailing courtesy. To be a good listener, we must be entirely self-possessed, "swift to hear, slow to speak, slow to wrath." It is polite to listen; it is often a real charity. We gain more esteem by what we hear than by what we say. Perhaps the highest art in conversation is to make others talk. The man who hears you may be bored; the man who talks to you never is. He may be dissatisfied with your views; he is sure to be pleased with his own.

How to Escape a Bore.

And if a man is tiresome, or becomes so by talking too much, the best way to escape is by a compliment. Thank him for the pleasure he has given, and do not deprive others of the benefit of listening to his instructive remarks. We are not to be insincere; for everybody is instructive, though too much of some kinds of instruction may become monotonous. But a man of tact will be able at any time to give a new turn to conversation, and adroitly throw it into the hands of a more entertaining colloquist.

Every one who goes into society—that is, who meets his fellowmen anywhere where conversation is possible—should know how to talk. We have written of speech as an accomplishment. We should speak loud enough to be heard, but not loud enough to stun those who are near us. Boisterousness is a sort of insolence. But we should speak with perfect distinctness, so as never to be obliged to repeat a sentence. An even flow of speech is a great comfort to the hearers. It is a pain to listen to people who speak painfully, and find it difficult to get out their words. Speech should be easy, simple, graceful, and, if possible, picturesque, animated, and melodious. There is no music like beautiful speech.

But the matter of speech must be as choice as the manner is good. When we have said good-morning, and made our congratulations or condolences on the state of the weather, and inquired about the health and conditions of mutual acquaintances, there is still something to be said. The world is full of interesting things, near or remote. Generally the near things are the most interesting. A burglary in the

same street is more to us than the destruction of a city in another hemisphere.

We cannot compel people to take an interest in the things that we consider most important. We must take the topics that are current at the time. If a great war is raging, it absorbs all interest. So a trial at law may fill newspapers and conversation. Some political movement, or some social scandal may be the topic of the time. We must do our best with the materials at hand; and what we need is a point of departure. When the conversation is begun, no one can quite tell what course it will take.

Don't Do All the Talking.

In talk there must be no monopoly. No one person ought ever to speak more than two or three minutes. Anecdotes or stories can only be used for illustration, and the most interesting one should not last five minutes. Give lectures, or go to lectures if you will, but there must be no lectures in conversation. Every person who wishes to speak must have the opportunity to do so just as much as to eat and drink; and when a man has had his say on any subject he cannot do better than to turn to some silent, but interested person—one of another sex, if convenient—and see what new contribution can be made to the common stock.

And almost every conversation is the better if seasoned with wit and enlivened with gayety. Humor is a gift, like poetry or music. Fun bursts out like fire. Wit is different. Some are quick-witted, and are always ready with some pertinent or impertinent remark, but others think out their retorts, as Byron did, and only come to them next day. Such people do well to think over all probable matters of conversation, and have their impromptus ready. But why should not a lady who is giving a party have her good things laid out with her clean linen, and all her jokes, and puns, and repartees in readiness, as one packs a hamper for a picnic?

With a full mind and a good memory, no one can be at fault. The good memory supposes order and self-possession. But all conversa-

tion should seem to be spontaneous, and prompted by the occasion. Story-tellers should have good memories, not only for the details of their anecdotes, but to avoid telling them too often in the same company. The same story should not be told more than twice, unless urgently demanded.

The specially social quality is good nature, amiability, the desire to please, the kindness of heart that avoids giving offense, and cannot bear to hurt any one's feelings. A good-natured person may frankly disagree with you, but he never offends. He quarrels good naturedly. He boxes with gloves on—when he fences ever so deftly, there is a great soft button on the end of his foil. He may satirize, ridicule, open up all your weakness and absurdities, but so kindly that you cannot help loving him. He cannot say a harsh, hard, bitter, or contemptuous thing, because he has no hardness and no contempt.

Avoid Every Approach to Vulgarity.

This is simple, natural goodness, like the goodness of fond and friendly animals. It may not be a high moral virtue; there is no particular merit in it any more than in beauty or any natural gift, but it is a very delightful quality, and those who do not possess it should imitate those who do. Just as we avoid in person, dress, or manners, anything that may give disgust or pain, so must we do in our conversation. We must no more use vulgar expressions than we would wear vulgar garments. Our talk should be as clean as our fingers. We should no more bite one with our words than with our teeth. An angry word is as bad as a blow, and a satirical word is like a sting.

If we are never to say anything to a person which will give him disgust or pain, we must be even more careful not to say anything of any one which will injure him in the estimation of others. Playful, good-natured criticism upon the little foibles and peculiarities of others, may be no harm, and even useful, but it ceases to be good-natured when it gives pain. Slander is a sin much worse than theft. Charity forbids that we should even tell the truth, when that truth can wound and injure. The best rule is to say all the good we can of every one.

and to refrain from ever saying evil, unless it becomes a clear matter of duty to warn some one against him.

At table, every subject must be such as will not interfere with appetite and digestion. The conversation should be light, so as not to tax the brain when the life-forces are gathered to the stomach. It should be cheerful, which is another name for convivial. It is better not to talk of food, because if people speak of their likings, they may also speak of their dislikes, and what one is fond of may disgust another. There should never be mentioned at table any subject of possible disgust.

Subjects Not to be Mentioned.

Some say one should never mention at table anything which might not properly be placed upon it. Consequently, one should never mention disease, or medicine, or anything connected with either. If one speaks of a voyage, he must omit the interesting fact of his having been seasick. At all well-regulated water-cure establishments there is an absolute rule against the mention of disease or treatment. There may be no harm in saying, "I had a glorious douche this morning;" but the discussion that might arise is to be avoided. Generally, nothing must ever be said at table which could, directly or indirectly, excite disgust. No more must there be said anything to excite anger. This is, of course, the rule in all conversation; but it is especially dangerous to get angry over one's dinner. Perfect good nature, and a certain degree of hilarity, befit every feast. People who are serious and thoughtful at table, are liable to become dyspeptics. The conversation should, therefore, be easy, playful, and mirthful. Party politics and sectarian religion may, therefore, as well be postponed.

In England, ladies leave the table soon after the dessert is served, and the gentlemen draw closer for wine and talk. A few years ago they drank much more wine than was good for them, and much of their conversation was quite unfit for ladies to hear. In our better days, no gentleman dares to reel back to the drawing-room; and the conversation of gentlemen is never indecent. Under these reformed conditions, why should the ladies leave the table at all, until all can

go together, as they came? There is no reason, but that Englishmen cling to all the old customs, however unreasonable. If a thing has been done once, the precedent is established, and it must be done forever. But nothing can be done the first time, because it is unprecedented.

In France and America, ladies and gentlemen leave the table together. We have books of the table-talk of famous talkers from Martin Luther to Sidney Smith, one of the most genial and benevolent as well as wittiest of colloquists; still, the dinner-table is not the place for intellectual conversation. The tea-table suits it better. The reception and the *conversazione*, where the refreshment of the body is quite a secondary matter, are places for real conversation. Morning parties on the hills, in forests, on shaded lawns, where well-assorted groups can read and talk, are perhaps best of all.

Common Sense and Information.

To talk well, we must have both sense and knowledge; but one who has sense must have knowledge also. The experience and observation of every one's life is an education. He who knows himself knows the most of what is worth knowing; and all knowledge consists in self-knowledge, and the knowledge of our relations to the world around us. Common sense, or the sense of things common to human beings, our thoughts and feelings, and the matter of our lives, is the best sense we can have, and what helps us most in conversation.

We do not usually talk about the sciences. How seldom are geology or astronomy mentioned in conversation. Chemistry is less discussed than cookery. Men do not talk much of geography or geometry. History and biography come nearer to us, and still nearer politics and commerce, literature and art—that is, the newest novels, and poems and pictures, or the songs of the season, are conversational topics in the best society. One must read the current literature, and know what is going on in the world; but the best of all knowledge for conversation is the knowledge of men, women and life.

And of all talents none is so useful as sympathy. When we feel

with and for our fellows, and can enter into the thoughts and feelings of every one we meet, rejoicing in their joys, sharing in their sorrows, ready with comfort and help, then our conversation is a delight. We win all hearts by sympathy more than by all gifts and accomplishments. The sympathetic attract ; the cold and heartless repel. We admire beauty, elegance, wit, eloquence ; but we love geniality, friendliness, goodness.

It is not necessary that these qualities should be expressed in words. Professions of benevolence, or of any virtue, are repulsive. All egotism is selfishness, and selfishness is the quality directly opposed to benevolence. We can show our love of virtue by practicing it, and recognizing and praising it in others.

Adapt Yourself to Others.

Our sympathy comes out in a thousand ways, and it is seen and felt by those who need it. It beams in the face of a kind-hearted man or woman, and reveals itself in the tones of the voice, and every mode of expression. Sympathy especially shows itself in the power of adapting ourselves to others—of becoming all things to all men, that we may do them good.

There are some faults we must carefully avoid in conversation—faults of character and faults of manner. It is not only our right, but it is our duty, to conceal our faults. If we have bad feelings we must suppress the expression of them. If I am angry, must I vent my rage? So if I feel emotions of pride or vanity, am I to strengthen them by giving them expression in words or actions? Certainly not. Every one in the company of others is on his good behavior. People who snap and snarl at home are polite enough abroad ; and the more they are under such restraint, the better. Society civilizes. The more we bring people together the more we improve their manners ; manners become habits ; habits mould hearts.

The lady who boasts becomes ridiculous. Modesty is a virtue highly appreciated by everybody's self-esteem. If I vaunt myself, my family, my property, my deeds, and make myself or any of my

belongings the subject of conversation, I offend more or less all who listen to me. It is distasteful to the meek, and offensive to the haughty. It is only in droll, bantering ways that people can speak of themselves, and the less they do so in any way, the better. A lady may, of course, tell her own story, simply and frankly, without consciousness of merit or affectation of modesty. She may relate things of herself very much to her credit, if there is no vainglorying.

Pass by Yourself.

A man can talk best of what he knows most about, but there is egotism and a temptation to some sort of vainglory when a man speaks much of his own profession or employment. We must talk of what interests others rather than ourselves, and in any case consult the tastes and enjoyments of others—the greatest good of the greatest number. There is a proverbial prohibition against “talking shop.” The clergyman is not to wear his surplice and the lawyer is not to carry his green bag. The doctor who has spent the morning in consultations should be glad to rest from patients and diseases. Society is for recreation; so every one can leave his work, and give play to faculties which need exercise. Still, when questions arise in conversation it is natural to appeal to those who have special knowledge.

It is best in all conversation to avoid technicalities not generally understood. As we modulate our voices so as to reach the most distant person in the group, so we should adapt our language to the comprehension of the most ignorant. The skilful orator is careful not to speak over the heads of his hearers when he wishes to convince, and reserves any high flight for the coruscations of his peroration. In conversation such displays are out of place. We talk to instruct and amuse; and amusement should be the vehicle of instruction.

Slang, doubtless, cannot be entirely banished; but it should be used very sparingly, and only the newest and best. Very nice slang becomes incorporated into the language. Poor slang has its day, and is thrown aside like last year's fashions. Most slang quickly becomes vulgar. One day some clever or fashionable person, econom-

ical of breath, said "thanks" instead of "I thank you." Many followed his example, but when the shop-boys began to pelt him with "thanks" he returned at once to be more elaborate expression. There was a time when the most opposite things were "awfully nice," but the alarming phrase went out with crinoline or chignons. There is a slang dictionary which it might be well to look over so as to see what to avoid.

A Dead Sea of Commonplaces.

Pet phrases and hackneyed commonplaces of expression destroy originality. The talk of many persons is entirely made up of these threadbare formularies. Many sermons are a patchwork of them; and we hear speeches of men of celebrity which consist almost entirely of conventional phrases. All this we should carefully avoid. Life is too short to spend in that way. The man who must talk twenty minutes when he has really nothing, or next to nothing, to say may be excused for padding out with a mess of verbiage. But in conversation the more we condense, the quicker we hit the nail on the head, the better. Diffuseness bores. A dozen persons are eager to express an opinion, or launch a witticism, and you pointlessly prose away for fifteen minutes. Only persons of very high position can be tiresome with impunity.

The stage gives us models for conversation. There are no long speeches or stories. No dramatist dares make an actor speak uninterruptedly for five minutes. Even the set orations in Shakespeare are delightfully short and to the purpose. No audience will hear a long, dull story badly told. Everywhere there must be fire, spirit, animation, deep earnestness, or lively fun, something to interest or amuse, to excite our sympathy or provoke our mirth.

A social party is an improvised comedy in which every actor should play his part as well, at least, as if he were on the stage with pay and plaudits. The actor, it is true, has his part written for him, studies it carefully, and practices with frequent rehearsals; but in our social life each has his part, with all his lifetime to make it perfect;

with constant rehearsal, and daily improvement in thought, expression, and action. Surely this work in earnest is better than any make-believe.

What we need for the conversation of social life is a good heart, a full mind, an earnest desire to please, the tact and delicacy never to offend, the motives of a Christian, and the manners of a gentleman or lady.

If you have read much and remember what you have read; if you have travelled much, and can describe well what you have seen and heard; if you have seen much of the world, and possess a fund of observation and anecdote; or if you are simply a clear thinker, and can easily arrange your thoughts, and group them into a picturesque expression, you have a right to a large share of the conversation of any circle.

Use Choice Language.

Let your words be as fit and well chosen as your clothes. Avoid coarseness and vulgarity in speech, as you would in costume. Dress your best thoughts, in words and phrases of corresponding beauty. Plain and homely subjects do not bear finery of expression; but a delicate sentiment may well be embellished with the flowers of rhetoric.

The first salutation may decide your fate with respect to the person you salute. Boldness may disgust, bashfulness seem a confession of meanness. People are inclined to take you at your own estimate or price, unless you appear to set it too high, when they are put on their guard not to be cheated.

Let your first address, then, be firm, quiet, dignified, cordial, but not too forward; confident, but not presuming, and as easy, natural, and unaffected, in air, gesture, and language, as possible. There are people with whom you are acquainted and at your ease in two minutes. But such persons are entirely at ease with themselves; entirely natural in their expression of themselves. They are what they seem, and seem what they are.

The common principles of equity or justice preside over conversa-

tion. All principles are universal in their application. We have no more right to be intrusive, or despotic, or overbearing, or in any way dishonest in our conversation, than in any other mode of action. We have no more right to pass off a counterfeit sentiment or a false opinion, than we have a counterfeit note or a false coin.

Conversation should, therefore, first of all, be honest. There is a certain allowance for irony, raillery, satire, and jocularly, as there is for games, sports, and pastimes; but whatever purports to be an expression of fact, or opinion, or feeling, should be altogether truthful.

Lying, and Accusing Others of It.

Two things we must never do. We must never tell a falsehood, and never accuse another of telling one. The one is a great wrong, the other a great insult. A lie is in the intent to deceive, and thereby injure. The untruth of badinage and drollery has no bad motive, and neither deceives nor injures. A mystification is not meant to harm any one. Irony may be the opposite of literal truth. But real, essential truthfulness is the first element of social confidence; and we should be carefully accurate in all serious speech, and never accuse another of what we would not do ourselves. If we doubt the correctness of a statement, we must express that doubt with delicacy and politeness.

It has been said that the hardest thing to tolerate is intolerance. But intolerance is bad manners, and bad manners are intolerable. The rule is not to intrude our own beliefs or unbeliefs, and especially the latter, for the assertion of unbelief is an attack upon belief. Infidelity is negation—contradiction. We may excuse the earnestness of one who wishes us to accept his belief, but why should a man wish to convert us to his unbelief? In any case, a man of delicacy and humanity will avoid giving pain.

Indecency of language is banished from all decent society. Equivocal expressions, *double entendre*, jests which mingle blushes with laughter are no longer tolerated. The novels that were once fashionable have become unreadable; the comedies that once drew crowded

and applauding audiences are scarcely read in the closet ; the songs and stories that once set the table in a roar are never heard. At the same time, there is less squeamishness and more freedom in the serious discussion of important though disagreeable subjects than formerly.

The facts of our social condition cannot be utterly ignored, and earnest discussion must accompany earnest work. The evils of society must be known that they may be remedied. They must be grappled with, or they cannot be removed. Such matters, however, can be introduced only by common consent, and in accordance with the law of supply and demand. The few should not force their favorite topics upon the many, and the many should have some regard for the feelings and even the prejudices of the smallest minority.

Impertinent Questions.

In conversation, questioning is often disagreeable and even offensive. Curiosity may become intrusive. No one likes to be cross-examined. No one likes prying into his private affairs. People do not like to be questioned about their ages, business, property, or personal relations. There are pertinent and impertinent questions ; questions which draw people out, and help them to talk well ; but there are also questions which embarrass and annoy. As a rule, it is better to make observations and suggestions than to ask direct questions.

To make a butt of any person in company, to expose him to ridicule, or turn the laughter of the company against him, is as much an outrage as it would be to pull his nose, slap his face, or box his ears. Ridicule is only justifiable where it is a fair game that two can play at ; a contest of well-matched wits, who encounter like a couple of wrestlers or fencers.

Women of great genius and varied talent are sometimes almost entirely lacking in conversational powers. Brilliant writers are often very poor talkers—shy, dull, silent, with no power of expression. On the other hand, an extreme volubility of small talk and commonplaces may accompany the utmost shallowness of mind.

There is a power in conversation, as in all modes of expression, which may be termed magnetic. Certain persons impress us deeply with a few simple words, or a quiet gesture, or a mere look. The words are nothing, the action is but a slight and simple movement, yet there is a power in them to charm, to thrill, to subdue us. It is the force of the spirit, the magnetism of a strong and penetrative or sympathetic soul. The same words from another person would not affect us.

This power in an orator or an actor is quite distinct from his subject or his words. It is his own power. He may be speaking on any subject; preaching any doctrine. It is believed by some that this mysterious power is communicated to the manuscripts of certain writers, and even to their printed works.

Show Attention and Interest.

Inattention, or the appearance of inattention, to a person speaking to you, is very bad manners. You should not only listen, but should seem to do so; and do nothing which can detract from that appearance. You need not continually reply, "yes," "ah!" "no," "you don't say," "fancy!" These exclamations have the benevolent intention of showing your interest in the speaker, and encouraging him to proceed, but they are something more than is requisite. Listen with a silent, thoughtful, interested or pleased attention. Look at the person who addresses you. Look him clear in the eye, or at least watch the expression of his countenance.

Many admirable conversationalists never argue or dispute. They assert the facts they know or believe to be true; they propound such principles as they entertain; they give opinions or make suggestions. If their facts are doubted or denied, they leave them to be settled by observation, testimony or competent authority. If their principles are questioned, they may state the science or analogies on which they are based. If their opinions are criticized, they only ask for the same toleration they give to others. Their suggestions and surmises are to be taken for what they are worth.

But many persons are fond of disputation. It is a mental exercise—an exciting game—a kind of cerebral gymnastics. Within the bounds of good breeding, and so conducted as not to give annoyance to others, these discussions may be harmless and even advantageous. But they can rarely be entered upon in general society.

Men argue, not to be convinced that they are in the wrong; not always to set others right, but to display their skill or triumph in a contest. Even in public discussions, where two or more able men are pitted against each other, and the partisans of each combatant assemble to hear them, how few are ever converted from one side to the other?

Opinions Seldom Changed by Hot Discussions.

In most discussions, we contend with prejudices, bigotries, and idiosyncrasies. How seldom do all the controversies continually going forward, in private conversations, in the pulpit, and by means of the press, convert a religionist, or even a politician, to an opposite faith? Politeness is truly cosmopolitan. It does not ask where one was born, or what she believes, nor even what she does, so long as it is her own personal affair. It only requires that she be a lady; and one true lady can do nothing to offend.

A bigot cannot be a lady, for she must obtrude her own prejudices, and attack those of others. A certain degree of tolerance for a variety of opinions, manners, and morals, adds to the interest of society, and prevents the necessity of excluding so many subjects that nothing remains to talk about. Doubtless, the more there is of freedom and toleration, the more interesting must be the conversation of any circle.

People who wish to please others pay them compliments, praise them, flatter them. Flattery is indiscreet, insincere, or selfish praise. Undeserved praise is the severest censure. Indiscreet praise exposes us to the jealousy of others. Insincere praise is lying with a benevolent or selfish motive. But honest, judicious praise is a matter of justice as well as kindness; and it not only gives pleasure, but is often a real benefit. We are probably too reticent in this respect—to

stingy of our applause. It is better to freely, generously, graciously commend whatever we find of excellence, and even all well-meant, even if unsuccessful, efforts.

What a stimulant to effort is the hearty greeting of an artist on his first appearance before an audience. The enthusiastic applause which rewards success is very delightful. We cannot always give the same expressions of applause in society, but we can and ought to give a frank expression of our good will, pleasure, admiration, and gratitude. We want more simple heartiness in such matters, and much less of that reticence which seems like stupidity, indifference, envy, or contempt.

The rules of politeness are never at variance with the principles of morality. Whatever is really impolite is really immoral. We have no right to offend people with our manners or conversation. We have no right to deal with or be influenced by gossip about the people we meet. Their private affairs are none of our business. If we believe a man to be unfit company for us, we must not invite him, but if we meet him where he has been invited by others, we must treat him with civility.

Cast Out Notorious Offenders.

If we know a man or woman to be a grave offender, we cannot use that knowledge to injure him or her, unless it is absolutely needful for the protection of others. The greatest and best men in the world have been assailed with calumny. The purest and noblest do not always escape it. We cannot investigate—as a rule we must disregard—all slanders. Where great offences become notorious, the offenders must be excommunicated. In all other cases we must give every one the benefit of a doubt; apply charitable constructions, hope for the best, and consider every one innocent until he is proven guilty.

There are little blunders in conversation we do well to avoid. It is better not to call out the names of persons we address. We have no right to call attention to the business or profession of any person, or our own, or to introduce private affairs into general society. Few

people like nicknames ; and we must give people their proper designations, unless they really wish us to do otherwise.

Avoid expletives and exaggerations, and deal sparingly with exclamations. You cannot laugh without explaining what you are laughing at. You cannot whisper without apology. Do not speak to any person in a language a third party cannot understand. This does not, of course, apply to the case of a foreigner, whom you address in his own language—but even then you ought to interpret. Do not quote Latin or Greek in the presence of those who may be presumed to be ignorant of either.

The rules for conversation are the same as for all behavior—simplicity, modesty, a calm self-possession, reverence for age and superiority of every kind, a desire to please others and promote their happiness, a forgetfulness of self, or utter absence of all selfishness, care of the absent, justice, benevolence, charity.

CHAPTER XXXV.

MISCELLANEOUS RULES OF ETIQUETTE.

Rights of the Sidewalk—Meeting on the Street—Washington's Politeness—The Veil—Street Recognition—Behavior in Church—Punctuality—Reverent Demeanor—The Tardy—The Talkative and Restless—Expressing Approval—How to Treat "Company"—Gallantry—Politeness at Home—The Hoiden—The Prude—Indoor Recreations—Undue Familiarity—Courtesy to Strangers—Formal Calls—Social Visits and Entertainments—Simpering and Frivolity.

YOUNG people often seem unconscious of the fact that their behavior on the street attracts the attention of older people, and impresses them with favorable or unfavorable ideas of their character. Propriety should govern all street behavior. Polite people never do anything on the street to attract attention; they should neither talk in a loud, boisterous manner, nor laugh uproariously. Conversation that is so noisy as to attract the attention of the passing crowd is either the result of ignorance or of a petty effort to secure a little vulgar notoriety.

It is not courteous for young persons of either or of both sexes to have long conferences on the street, as they may obstruct the sidewalk, and at the same time excite both critical and unpleasant remarks. Every person is entitled to his share of the sidewalk, and this right should always be respected. It is only the rude, low-bred woman and the blustering bully that assert their vulgarity by refusing to give the half of the pavement. As a gentleman or lady can never afford to come in collision with such people, it would be better they should even leave the sidewalks than be jostled. To assert our real or fancied superiority by depriving others of their rights is rude and vulgar.

When persons pass each other on the pavement, they should observe the same rule that drivers do on the street, in order to avoid the inconvenience and danger of a collision. Each should keep to the right. When a gentleman and lady walk in company, he should

be at the lady's left, in order to prevent those passing from running against her. There is no necessity for the gentleman to change his position at every corner, in order that he may be on the side next the street. She will be protected better if always at the gentleman's right. Persons walking in company should always keep step together.

When a gentleman and lady cross the street in company, and the crossing is narrow and muddy, requiring them to go singly, delicacy requires that he should precede her, for the same reason that he should be the first to go upstairs and the last to come down.

Persons should not be so engrossed in conversation as to pass their friends upon the street without notice, if it only be a slight inclination of the head and a pleasant smile. Serious offense may be unwittingly given to those whom we should have recognized, but seemed to forget. Such apparent neglect is very trying to the self-love of sensitive people, and may be mistaken for intentional rudeness.

Anecdote of Washington.

Captain Stephen Trowbridge, once the oldest male inhabitant of Milford, N. H., told the following incident of Washington's visit to that village in 1790: While the latter was walking about the town, attended by a number of his officers, a colored soldier, who had fought under him and lost a limb in his service, made his way up to the general and saluted him. Washington turned to this colored soldier, shook hands with him, and gave him a present of a silver dollar. One of the attendants objected to the civilities thus shown by the President of the United States to such an humble person; but Washington rebuked him sharply, asking if he should permit this colored man to excel him in politeness.

When a lady appears on the street with a veil over her face, it may sometimes be a sign that she does not wish to be recognized, and an acquaintance may pass her as a stranger, without either giving or taking offense. If the lady, on approaching, shall remove her veil, it indicates that she wishes to be seen and known.

Young people should always be prompt to acknowledge the polite-

ness of those who notice them. They should never speak to their superiors first, as it might be construed as a mark of pert familiarity ; but when a lady or gentleman wishes to salute them, they should respond with a pleasant "good-morning" or "good-evening," as the case may be, accompanied by an agreeable smile. It is expected that a lady will always recognize the gentleman first; a girl, the boy ; and, as a rule, the superior the inferior in age or station.

It is presumed that young people know and are willing to respect the usages of the church which it is their custom to attend ; but as it may not be so clear what politeness requires of those who visit churches of other denominations, a few words may not be inappropriate upon the subject. As has already been indicated, the right of worship is one of the inalienable rights of every man, and it is one of the glories of our republican government that it assures to every man the full enjoyment of this right in the erection of houses of worship, and in the exercise of any forms of religious service.

Behavior in Church.

There is a marked difference in the forms of worship in the synagogue, the cathedral, the church, and the meeting-house, and if the Jews, the Catholics, the Episcopalians, or the Friends will open their doors, that we may witness their ceremonies, the least that we can do in accepting their invitation is to behave in a becoming manner. No more serious offense can be committed than to show disrespect to any person's religious faith, especially in the house dedicated to the worship of God. As our attendance there is an entirely voluntary matter, we shall be inexcusable if we injure the feelings of any by an apparent disregard of the sanctities of the place.

Mrs. Chapone was asked why she always went so early to church. "Because," said she, "it is a part of my religion not to disturb the religion of others." Appreciating this idea, we should be punctual to the hour appointed for the services to commence, or, if by accident we arrive too late, we should wait at the door during the opening exercise, and enter when there is a change in the service.

The entrance to the church should be in as noiseless a manner as possible, and with as little clattering of shoes or rustling of dresses as can be made. Such exhibitions as are sometimes given of new fashions by those who enter late provoke criticisms, not only unsuitable to the time and place, but also very uncomplimentary to the exhibitors. Refined people never display such extreme vulgarity. If we are not acquainted with the usages of the place, an officer or person appointed for such duty will conduct us to a suitable seat. If invited to follow him, we should do so, taking the place he assigns, and thanking him quietly, at least by a smile, for his courtesy.

Conforming to Customs of Worship.

It is the custom of the Turks, when they enter a mosque, which is a Mohammedan place of worship, to take off their shoes, that the sacred place may not be defiled. There are those in this land who, when they enter even their own church, not only do not remove their shoes, but fail also to clean off the mud that adheres to them. A decent respect for the usages of good society might prompt such people to practice the external rules of politeness, even if no higher motive should influence them.

If the services are such that we may properly join them, it is our duty to do so. It is rude to sit when the congregation stands, unless we have some conscientious scruples against standing. If there be anything strange or peculiar in the ceremonies, it is the grossest rudeness to express any marks of disapprobation or contempt by talking or laughing. Such misconduct is inexcusable. Nor is it proper to read a paper or book during the service, as it appears disrespectful to the minister, the choir, and the congregation, by an implied indifference to the sermon and the services.

Do not appear to be inattentive, not look at your watch, nor yawn, nor sleep, nor be in an unbecoming haste to leave when the exercises are over. Unless sickness or some imperative call compel you to leave the house, you should remain until the close of the service. When the congregation is passing from the house, do not crowd and

jostle, as if you were in a hurry to leave. Be calm, decorous, and dignified. If a lady, you should refuse to be escorted by one who waits outside for your appearance.

When we buy a ticket to a concert or lecture, we purchase a right to all the enjoyment the entertainment affords, subject, however, to the restriction that we do not interfere with the rights of others. We may secure a reserved seat, but have no right to go in at such a time or in such a manner as to disturb others after the exercises have commenced. If the seats have not been reserved, those who come first have the choice.

It is not uncommon to see men and women enter the hall after the exercises have begun, who seem utterly ignorant of the proprieties of the place, or indifferent to the rights of all present. Oftentimes they take no care to come in gently, and manifest no desire, apparently, to avoid the disturbance their entrance occasions. It is such women that push up far to the front, and stand at some gentleman's side, who has come early and secured a seat, in the expectation that he will surrender his place. Gentlemen are thus sometimes deprived of their rights by the coarse manners of an unfeeling, selfish woman, who has not even the politeness to acknowledge the courtesy.

A Mark of Bad Breeding.

A lady should feel a great reluctance in depriving an acquaintance, and much more a stranger, of a seat to which she has no claim. Any gentleman who surrenders his seat under such circumstances does it out of pure gallantry, and any lady who receives such a favor should feel under special obligations, and promptly return her thanks to the donor. The neglect of such an acknowledgment is a mark of very bad breeding.

The signs that distinguish rude pupils in school are the very same that mark the impolite at the concert. They talk and chatter and simmer, to the intense disgust and annoyance of the really discriminating and intelligent portion of the audience. Well-bred persons pay more respect to the rights and feelings of their neighbors than to

indulge their own selfishness in that manner. The cracking and eating of nuts, and the rustling of fans, programmes, and dresses, are all exhibitions of thoughtless rudeness, and are unbecoming in a place devoted to literary or musical culture.

Young folks, on such occasions, are sometimes excited. They lose their self-possession, and become impatient for the exercises to begin. Feeling in this condition, they offend against good taste by whistling, cat-calling, and shouting. Such exhibitions of vulgarity do not distinguish refined and polished people, and always give offense to the better and more cultivated portion of the audience.

Showing Approbation.

If the sentiments of the speaker or performer are agreeable, we may approve them by the clapping of hands for his encouragement but if they do not meet our approbation, we need not offend others by hissing or giving other evidences of disapproval. We must bear in mind that every man and woman has a right to express opinions in this country, and if we do not like them we are not compelled to hear them; but if we go to learn, it is our duty to listen patiently and forbearingly. Stamping is a very objectionable form of applause, since it usually raises a dust, that is very disagreeable to the audience.

It is one of the rudest breaches of politeness for a lady to intimate to a gentleman that she would be pleased to have him escort her to any public entertainment, especially where tickets are to be purchased. Such conduct would place her under a very unpleasant sense of obligation, and may be the cause of much embarrassment to the gentleman. He may have other plans which will be disturbed by such an invitation, or, if he be in limited circumstances, the loss of the money may prove a serious inconvenience. If he gives the lady an invitation, it rests with her to accept it, or respectfully to decline.

No young lady will accept such politeness without the approbation of her family and friends, since it is probable that they have better opportunities of knowing whether all the circumstances are suitable. Before the hour appointed, the young gentleman should call at her

residence, when she, anticipating his coming, should be ready, without delay, to accompany him. Sometimes young ladies are very inconsiderate. Although they are aware they will be called for, they postpone their preparation until it is so late that they lose much of their pleasure in their hurry, or mortify their friends by coming late.

If a lady declines to accompany a young gentleman, she should not mention it under any circumstances. It is very unbecoming, when he is so polite as to offer her a kindness, that she should add an insult to the refusal by telling it. A real lady is never boastful of her ability to win admiration, and, much less, should she be willing to triumph over those whose attentions she has declined.

Imposing upon Gentlemen.

On entering the place of amusement, the gentleman should precede the lady, secure a seat for her, and not let her hunt one for herself. It is extremely indelicate for a lady even to suggest that a gentleman should make a purchase of any luxury, as fruit, nuts, or refreshing drink, although it would be proper to request him to procure a glass of water. The latter, generally, could be easily obtained by a little personal effort, which he would gladly make; while the former might cost what he could ill afford to spend.

When the exercises are over, the gentleman should accompany the lady to her home. If the hour is suitable, the lady may invite him into the house; but, if it is too late, she should say, very frankly: "It is too late to invite you to come in, but I shall be pleased to have you call again." It is very unbecoming for young people to stand at the door to converse, and may give rise to unpleasant remarks. No young lady can be too careful to prevent the appearance of any familiarity that may not seem to be sanctioned by her parents and friends. If the gentleman enters the house, he should be too prudent to prolong his stay beyond a proper hour, and thus "wear out his welcome." Such thoughtlessness may interfere very seriously with the arrangements of the household, and prove a real trespass upon the time and good nature of the lady herself.

One of the distinguishing features of our times is the respect that is shown to woman. The lowest civilization exhibits the female as degraded and oppressed ; treated like a beast of burden, and made entirely dependent upon man ; while the condition of society in which we live is made remarkable by the fact that she is recognized as the equal of man, socially and religiously, and fit to be his trusted friend and counselor.

Her claims to the best education are respected, so that she may become intellectually as great as her industry, her capacity, and her ambition will allow. There is no limit to woman's influence for good or evil. What she is fitted to do she may accomplish, and every day her ability is demonstrated in new and hitherto untried fields of exertion.

Filial Affection.

The place above all others in which woman's inspiration is happiest and best is as wife, mother, sister, or friend, at home. It is there in these relations that we learn to know her best and love her most. For young men to reverence the sex is but to pay a tribute of love to the influence of their own mothers. The highest compliment that can be offered a young man is that he is a tender, devoted son and brother, and the worthiest sentiment that can be uttered in praise of a woman is that she inspires a son or a brother with such respect and affection.

The hoiden is defined to be a rude, rough, romping girl. The term will apply to such as are not restrained by the rules of polite society to be courteous and civil, but are continually planning and performing unmaidenly actions. A kind of independence which asserts itself in always doing right, is not the kind that charms the hoiden. She delights to indulge in violations of propriety, which sometimes shock and always annoy her more discreet companions. Such a character is not the one that wins commendation, much less admiration and respect, from good society. Young men may appear to enjoy her company, but she can never be regarded with that high esteem which arises from confidence in her modesty and reliance upon her good sense.

The prude is defined to be a female of extreme reserve, who affects peculiar delicacy and coyness of manners. This character is cold, dignified, and unsociable; always fearful of compromising her reputation, always sensitive, censorious, and apt to misinterpret the words and actions of others. It is difficult to determine which is the least entitled to respect, the hoiden or the prude; both are unlovely and unwomanly.

The place above all others in which these peculiar and striking phases of character are manifested is in the sociable or small party. The excitement incident to such an assembly tends to exhibit the natural dispositions of each individual. Some (and this applies to both sexes) are noisy, rude, thoughtless, and inconsiderate; while others are cold, formal, and constrained. To neutralize these diversities, and enable all to contribute to the enjoyment of the occasion, games and amusements of all kinds are brought into requisition.

Rough Plays.

There is a great diversity in the forms of recreation which may be enjoyed by the young indoors. Some of these are ingenious, amusing, and instructive. Every one in the company should join in any diversion which does not violate her conscience or her sense of propriety. Any play that is rough and rude, in which there is danger of injury to persons, to furniture, or to clothing, ought not to be tolerated in the house. Such exercise is for the open air and the lawn.

That amusement which permits any improper familiarity between the sexes is not in good taste. If the game requires the boys to catch, and struggle, and wrestle with the girls, or even to put their hands upon their persons, or to kiss them, it is of very doubtful propriety. Such freedom is not consistent with that respect which the sexes should cultivate for each other.

No girl should permit a boy to be so familiar as to toy with her hands, or play with her rings; to handle her curls, or encircle her waist with his arm. Such impudent intimacy should never be tolerated for a moment. No gentleman will attempt it; no lady will permit it.

That was a witty reproof administered to a thoughtless young man by a young lady. As they were sitting together on the sofa, he carelessly extended his arms upon the back of the seat behind her. "Does your arm pain you?" said she. "Why, no," he replied; "but why did you ask?" "I thought it must pain you, for I observe it is badly out of place."

When strangers enter a community, either to make a visit or to secure a home, politeness requires that those who desire to make their acquaintance shall manifest their disposition to be sociable by giving them the first call. The moral law, no less than the social, requires that we shall treat them with courtesy and kindness, as it is written, "Be not forgetful to entertain strangers." As a general rule, nothing is more grateful to a person of refinement, in a strange place, than to receive evidences of kind consideration and friendly regard from those into whose midst he is accidentally thrown. When a call is made upon a stranger, he or she should be politely invited to return the compliment, which should be done at the earliest convenience.

Friendly Visits and Calls.

It frequently happens that persons have a long list of acquaintances, with whom, on account of the pressure of domestic cares, or other important business, which demands the greater part of their time, they cannot be on terms of intimacy, and yet who desire to cultivate their friendship by the exercise at least of a formal sociability. In order to accommodate this social necessity for recognition, it is the custom to make brief visits or calls, at such times as are convenient, upon those with whom we are accustomed to associate.

As the call is necessarily short, it is not expected that ladies shall remove their bonnets or shawls. When calls of this kind are made, and the same may be said of all visits, the visitor should always enter at the front door, but never until after giving a warning by the knocker or door-bell. The degree of intimacy which would justify the violation of this rule, and especially an entrance without the use of the knocker or bell, should be very clearly established. Such intercourse

is too unceremonious to base upon it any reasonable expectation of permanence, since, "Too much familiarity breeds contempt."

When the summons is answered by the opening of the door, inquiry should be made for the person or persons in whose honor the call is made; if they are not in, or circumstances prevent their appearance, the caller may leave a card, upon which his or her name is written, which shows that the call has been made. If cards are not prepared, a verbal message may be left, though it is less likely to be delivered. In such cases, the card or the message stands instead of the call.

When calls are not returned, it is understood that even a formal sociability is not considered agreeable.

Pleasant Evenings with Neighbors.

The call is a visit of ceremony among acquaintances, but the social visit is the informal meeting of intimate friends, who may spend hours in each others' society, with mutual pleasure and profit. Such meetings may be accidental, as when friends drop in to enjoy a pleasant evening with a neighbor, without invitation or previous notice on either side. In these little gatherings, the ceremony and style of more formal visits are dispensed with, and hearty good will and neighborly love and kindness have their freest and happiest manifestations in conversation, music, or other recreation.

If no previous announcement of the visit has been sent, the visitor must not feel hurt if he finds, on his arrival, that a former engagement will prevent his friends from affording him the anticipated pleasure. He should excuse them to fulfill their appointments, and lay his plans to come again under more favorable circumstances.

We should always bear in mind that it is our duty to assist in entertaining and making others happy, and in relieving the embarrassment of those who are not self-possessed. Particular attention should be shown to the aged, the sick, and the deformed; not in such a way as to make them conspicuous, but only to render them happy and comfortable. A kind word and a pleasant smile should be ready for every one. Care should always be taken not to show particular

or too frequent attention in company to our favorites, lest it may excite jealous feelings and unpleasant remarks.

Do not simper. If there is anything to enjoy that is worthy of a laugh, laugh heartily ; but remember that uproarious, boisterous mirth is exceedingly vulgar. The ruder the people are, the louder and coarser will be their expressions of enjoyment.

If a person is requested to divert the company with instrumental music, a song, or a story, we should stop our conversation, and listen respectfully till it is ended. Possibly the entertainment may not be very agreeable to us, but the respect we owe to the company, who, it may be, are very much pleased, and to the performer, who is trying to gratify us, should compel us to be attentive. Loud talking and immoderate laughter are frequently heard during the performance of music from those whose selfishness will not permit them to make any sacrifice of their own pleasure for the gratification of others.

Do Not Wait to be Coaxed.

It is very rude for a young person to offer to entertain a company without an invitation. When one has the ability to sing or play well, and is invited to perform, she should do so promptly and gracefully, nor wait to be urged. Young people sometimes expect a great deal of coaxing before they comply with a polite request. When one accepts the invitation to sing or play, she should be very careful not to weary the audience by continuing the effort too long. It is better to err on the safe side by singing too little than to cause annoyance to those who would prefer a change.

We should never ask any person to sing or play unless we are very sure it will be generally agreeable. To give such an invitation as a mere compliment, without desiring to have it accepted, is extremely rude and hypocritical. When a lady declines to exhibit her accomplishments, it is not polite to insist, as there may be good reasons for the refusal, which it would be improper to make known to the company.

Some persons are fond of collecting pretty, delicate, and rare speci-

mens of shells, corals, pictures, etc., and are very sensitive about their being fingered by unskillful hands. When such ornaments are placed upon the mantle or table, they are to be seen, but not handled, unless at the invitation of the owner. We may look at them, and admire their curious combinations of color, but if we should ruin a delicate shell or coral by letting it fall, or in some other manner, it will be a poor apology to say that the injury was the result of accident.

We should not yawn in company, nor consult the watch, as if we were tired. If it be necessary to leave before the proper time arrives for the company to go home, it is better to do so without attracting attention. It is not discreet to "wear out one's welcome," by staying to an unreasonable hour; it would be better to have our friends regret our going than to wish we were gone. When leaving the house of our entertainers, we should always see them and bid them good-bye.

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